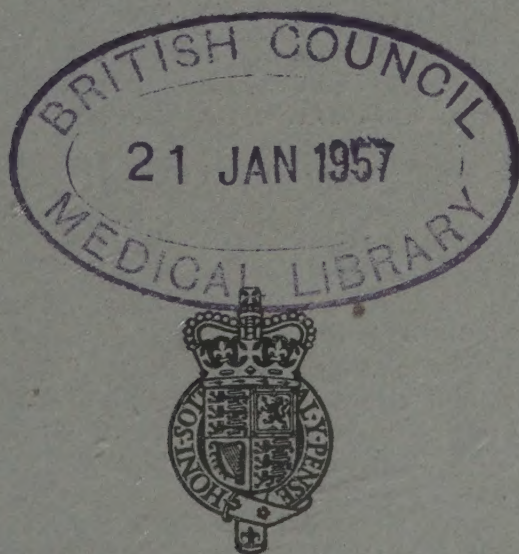


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THE
REGISTRAR GENERAL'S
STATISTICAL REVIEW
OF
ENGLAND AND WALES

FOR THE YEAR
1953

TEXT VOLUME



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1956

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EXPLANATORY NOTES

1. Change in Presentation

Aggregates summary

National aggregate summaries by type of area relate to aggregates of (a) conurbations, and (b) areas outside the conurbations, including separately :—Urban Areas with (i) populations of 100,000 and over, (ii) populations of 50,000 and under 100,000 and (iii) populations under 50,000 ; and Rural Districts. For this purpose "Urban Areas" includes Boroughs and Urban Districts as defined under the Local Government Acts, and Rural Districts are as defined under those Acts.

2. Population Revision

Some of the rates shown in this volume for years 1951, 1952 and 1953 differ slightly from similar rates published in the Tables volumes of the Statistical Review for those years owing to the revision, in the light of final data from the 1951 Census, of the population estimates on which they are based (see page 8).

3. Numbering of Tables

Of the tables referred to in this review, those numbered in Arabic numerals will be found in "Tables, Part I—Medical" and those lettered will be found in "Tables, Part II—Civil" for the year in question, whilst those numbered in Roman numerals appear in this volume.

4. Indication of Significance

Rates based upon less than 20 births, deaths or cases notified are distinguished by italic type as a warning to the user that the smallness of the experiences may affect their significance. Rates given as 0 indicate that the rate is insignificant. A dash (—) in tables showing rates indicates that there were no births, deaths or cases.

5. Definition of Areas

London=Administrative County of London which consists of the City of London (including the Inner and Middle Temples) and the Metropolitan Boroughs.

C.B.=County Borough ; M.B.=Municipal Borough ; U.D.=Urban District ; R.D.=Rural District.

6. Regions

The constitution of the Standard Regions of England and Wales used in this volume is as follows :—

<p>REGION I. <i>Northern.</i> Cumberland. Durham. Northumberland. Westmorland. Yorkshire, North Riding.</p> <p>REGION II. <i>East and West Ridings.</i> Yorkshire, East Riding. Yorkshire, West Riding.</p> <p>REGION III. <i>North Midland.</i>¹ Derbyshire, Part of¹ Leicestershire. Lincolnshire— Parts of Holland. Parts of Kesteven. Parts of Lindsey. Northamptonshire. Nottinghamshire. Peterborough, Soke of Rutland.</p>	<p>REGION IV. <i>Eastern.</i> Bedfordshire. Cambridgeshire. Ely, Isle of Essex, Part of² Hertfordshire, Part of³ Huntingdonshire. Norfolk. Suffolk, East. Suffolk, West.</p> <p>REGION V. <i>London and South Eastern</i> Essex, Part of⁴ Hertfordshire, Part of⁵ Kent. London, Admin. County. Middlesex. Surrey. Sussex, East. Sussex, West.</p>	<p>REGION VI. <i>Southern.</i> Berkshire. Buckinghamshire. Dorset. Oxfordshire. Southampton. Wight, Isle of.</p> <p>REGION VII. <i>South Western.</i> Cornwall. Devon. Gloucestershire. Somerset. Wiltshire.</p> <p>REGION VIII. <i>Wales I. (South East)</i> Brecknockshire. Carmarthenshire. Glamorganshire. Monmouthshire.</p>	<p><i>Wales II. (Remainder)</i> Anglesey. Caernarvonshire. Cardiganshire. Denbighshire. Flintshire. Merionethshire. Montgomeryshire. Pembrokeshire. Radnorshire.</p> <p>REGION IX. <i>Midland.</i> Herefordshire. Shropshire. Staffordshire. Warwickshire. Worcestershire.</p> <p>REGION X. <i>North Western.</i> Cheshire. Derbyshire, Part of⁶ Lancashire.</p>
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1. All except Buxton M.B., Glossop M.B., New Mills U.D., Whaley Bridge U.D., and Chapel en le Frith R.D.

2. All except East Ham C.B., West Ham C.B., Chingford M.B., Wanstead and Woodford M.B., Leyton M.B., Walthamstow M.B., Ilford M.B., Barking M.B., Dagenham M.B., Waltham Holy Cross U.D., and Chigwell U.D.

3. All except Barnet U.D., Bushey U.D., Cheshunt U.D., East Barnet U.D., and Elstree R.D.

4. All areas stated in 2 above.

5. All areas stated in 3 above.

6. All areas stated in 1 above.

7. Conurbations

The conurbation areas used in this volume were agreed by an interdepartmental committee, representing the principal Departments preparing statistics, as a means of securing uniformity and comparability in statistics published by Government Departments in the United Kingdom.

Conurbation is the word used to describe those areas of urban development where a number of separate towns have grown into each other and become linked by such factors as a common industrial or business interest, or a common centre of shopping, education, etc. The conurbations each consist of an aggregation of entire local authority areas and are constituted as follows :—

Tyneside :

<i>Durham (pt. of)</i>	<i>Durham (pt. of)—contd.</i>	<i>Northumberland (pt. of)</i>	
Gateshead C.B. South Shields C.B.	Felling U.D. Hebburn U.D. Jarrow M.B. Whickham U.D.	Newcastle-upon-Tyne C.B. Tynemouth C.B. Gosforth U.D.	Longbenton U.D. Newburn U.D. Wallsend M.B. Whitley Bay U.D.

West Yorkshire:

Yorkshire, West Riding (pt. of)

Bradford C.B. Dewsbury C.B. Halifax C.B. Huddersfield C.B. Leeds C.B. Wakefield C.B.	Aireborough U.D. Baildon U.D. Batley M.B. Bingley U.D. Brighouse M.B. Colne Valley U.D. Denby Dale U.D. Denholme U.D. Elland U.D.	Heckmondwike U.D. Holmfirth U.D. Horbury U.D. Horsforth U.D. Keighley M.B. Kirkburton U.D. Meltham U.D. Mirfield U.D. Morley M.B.	Ossett M.B. Pudsey M.B. Queensbury and Shelf U.D. Ripponden U.D. Rothwell U.D. Shipley U.D. Sowerby Bridge U.D. Spenborough U.D. Stanley U.D.
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South East Lancashire :

<i>Cheshire (pt. of)</i>	<i>Lancs. (pt. of)</i>	<i>Lancs. (pt. of)—contd.</i>	<i>Lancs. (pt. of)—contd.</i>
Stockport C.B. Alderley Edge U.D. Altrincham M.B. Bowdon U.D. Bredbury and Romiley U.D. Cheadle and Gatley U.D. Dukinfield M.B. Hale U.D. Hazel Grove and Bramhall U.D. Hyde M.B. Marple U.D. Sale M.B. Stalybridge M.B. Wilmslow U.D. Disley R.D.	Bolton C.B. Bury C.B. Manchester C.B. Oldham C.B. Rochdale C.B. Salford C.B. Ashton-under-Lyne M.B. Audenshaw U.D. Chadderton U.D. Crompton U.D. Denton U.D. Droylsden U.D. Eccles M.B. Failsworth U.D. Farnworth M.B. Heywood M.B.	Horwich U.D. Irlam U.D. Kearsley U.D. Lees U.D. Littleborough U.D. Little Lever U.D. Middleton M.B. Milnrow U.D. Mossley M.B. Prestwich M.B. Radcliffe M.B. Royton U.D. Stretford M.B. Swinton and Pendlebury M.B. Tottington U.D.	Urmston U.D. Wardle U.D. Westhoughton U.D. Whitefield U.D. Whitworth U.D. Worsley U.D. Limehurst R.D.

Merseyside:

<i>Cheshire (pt. of)</i>	<i>Cheshire (pt. of)—cont.</i>	<i>Lancs. (pt. of)</i>	<i>Lancs. (pt. of)—contd.</i>
Birkenhead C.B. Wallasey C.B. Bebington M.B.	Ellesmere Port U.D. Hoylake U.D. Neston U.D. Wirral U.D.	Bootle C.B. Liverpool C.B. Crosby M.B.	Huyton with Roby U.D. Litherland U.D.

West Midlands :

<i>Staffs. (pt. of)</i>	<i>Staffs. pt. of—contd.</i>	<i>Warwickshire (pt. of)</i>	<i>Worcestershire (pt. of)</i>
Smethwick C.B. Walsall C.B. West Bromwich C.B. Wolverhampton C.B. Aldridge U.D. Amblecote U.D. Bilston M.B. Brierley Hill U.D. Coseley U.D.	Darlaston U.D. Rowley Regis M.B. Sedgley U.D. Tettenhall U.D. Tipton M.B. Wednesbury M.B. Wednesfield U.D. Willenhall U.D.	Birmingham C.B. Solihull U.D. Sutton Coldfield M.B.	Dudley C.B. Halesowen M.B. Oldbury M.B. Stourbridge M.B.

Greater London:

<i>London</i>	<i>Surrey (pt. of)—contd.</i>	<i>Kent (pt. of)—contd.</i>	<i>Essex (pt. of)</i>
<i>Middlesex</i>	Kingston upon Thames M.B.	Chislehurst and Sidcup U.D.	East Ham C.B. West Ham C.B.
<i>Surrey (pt. of)</i>	Malden and Coombe M.B. Merton and Morden U.D. Mitcham M.B. Richmond M.B.	Crayford U.D. Erith M.B. Orpington U.D. Penge U.D.	Barking M.B. Chigwell U.D. Chingford M.B. Dagenham M.B. Ilford M.B.
Croydon C.B.		<i>Herts (pt. of)</i>	
Banstead U.D. Barnes M.B. Beddington and Wallington M.B. Carshalton U.D. Coulston and Purley U.D.	Surbiton M.B. Sutton and Cheam M.B. Wimbledon M.B.	Barnet U.D. Bushey U.D. Cheshunt U.D. East Barnet U.D. Elstree R.D.	Leyton M.B. Waltham Holy Cross U.D. Walthamstow M.B. Wanstead and Woodford M.B.
Epsom and Ewell M.B. Esher U.D.	<i>Kent (pt. of)</i> Beckenham M.B. Bexley M.B. Bromley M.B.		

8. Assignment of Vital Statistics by Area

In all tables births and stillbirths are classified according to the area of usual residence of the parents (or mother), and deaths according to the usual residence of the deceased. The definition of usual residence for this purpose was modified in 1953, the main change being that inmates of hospitals for the chronic sick and of mental and mental deficiency hospitals were in that year regarded as having been resident in the hospital. (A similar change with regard to persons dying in accommodation provided under Parts III and IV of the National Assistance Act, 1948, had already been brought into effect during 1952.) Rates for areas in 1953 are therefore not comparable with those for 1952. Details of the new definitions were conveyed to Medical Officers of Health in 1952 in a memorandum which is reproduced below for the readers' information.

MEMORANDUM ON TRANSFERS OF BIRTHS, DEATHS AND STILLBIRTHS

1. Object of Procedure

Generally speaking population estimates and vital statistics are most useful when they are based on usual residence, and it is obviously desirable that vital events should, whenever possible, be assigned to the area of the population at risk. The procedures described below accordingly aim at assigning deaths to the area of usual residence of the deceased and births and stillbirths to that of the parents (or, where they are living apart, that of the mother).

2. Usual Residence

Vital events in England and Wales are registered in the areas in which they occur, and the addresses at which they occur are recorded in the registers. When the address is not the usual residence, it is therefore necessary for the Registrar of Births and Deaths to obtain at registration information about the place of usual residence, so that the event can, for statistical purposes, be "transferred" to that place. As will be seen from 4(b), vital events relating to people with no usual residence (as defined below) within England and Wales are not transferable. The following rules are laid down for the guidance of Registrars of Births and Deaths and Medical Officers of Health:—

- (1) The following types of institutions are regarded as the usual residence of their inmates:—

Accommodation provided under Parts III and IV of the National Assistance Act, 1948.

Almshouses
Approved Schools
Boarding Schools
Borstal Institutions
Children's Homes
Convents
Epileptic Colonies
Homes for Incurables
Homes for Mentally Defective Children
Hospitals for the Chronic Sick
Institutions for the Blind
Institutions for the Deaf or Dumb
Mental Deficiency Institutions
Mental Hospitals
Monasteries
Nursing Homes for Aged and Chronic Sick
Nursing Homes (Mental)
Orphanages
Prisons
Residential Nurseries
Residential Universities

- (2) The following types of institution are not regarded as the usual residence of their inmates except in the circumstances indicated in (4):—

Convalescent Homes
General, Maternity and Special Hospitals
Homes for Unmarried Mothers
Hotels, Boarding Houses, etc.
Maternity Homes
Nursing Homes (General)
Sanatoria

(3) **“ Mixed ” Institutions**

Where institutions of more than one type are housed in the same or in adjacent buildings (for example, former “ mixed ” workhouses used partly as hospitals and partly as Part III accommodation under the National Assistance Act), the following procedures will be adopted:—

- (a) Where the appropriate part of the institution can be identified (e.g., where the component parts have separate names or addresses or where the informant on registration knows in which part the birth or death took place) the separate parts will be treated as separate institutions for the purpose of deciding whether they are to be regarded as the usual residence.
- (b) Where it is not known in which part the birth or death occurred, it will be assumed to have occurred in that part for which the institution is used predominantly (determined according to the type of controlling authority). Thus in such circumstances a “ mixed ” institution controlled by a Regional Hospital Board will be treated as a hospital, while a “ mixed ” institution controlled by a local authority will be treated as Part III accommodation.

(4) **Special Cases**

- (a) **Residential Staffs** (e.g. maids living in hotels, domestic staff living in a house).

The institution or other place where such persons are resident is regarded as the usual residence.

- (b) **Visitors from abroad, permanent residents in hotels, boarding houses, nursing homes, etc.**

Where there is no evidence of a more permanent residence being maintained elsewhere in England and Wales, any house, hotel, or institution in which the person was residing at the time of, or immediately before, the event will be regarded as the usual residence.

- (c) **Armed Forces (including Allied Forces).**

The place in which they are stationed is regarded as the usual residence. Events relating to forces on leave from abroad are thus not transferable.

- (d) **Infants.**

The mother's usual residence is regarded as the usual residence of an infant unless some other usual residence has been established, e.g., by adoption. This covers, in particular, infants born in maternity homes who die before they are sent home.

3. Arrangements for notifying transfers

Subject to the above rules, all deaths taking place away from the area of usual residence are assigned to that area by the Registrar General and are notified to Medical Officers of Health in the following way :—

The Registrar General sends quarterly to the Medical Officers for County Boroughs and Metropolitan Boroughs and to County Medical Officers for distribution to District Medical Officers, outward transfer slips, showing in respect of each administrative area the registered number entry of each death assigned elsewhere. He also sends monthly* to the same officers a form (S.D.A.f.) giving particulars of each inward transfer. The transfer of births and stillbirths is not similarly notified.

4. Revision of Assignments

It will sometimes happen that an event is wrongly assigned, either in error or because insufficient information is obtained at registration. In such circumstances a transfer between districts within a county may be arranged, either direct or through the County Medical Officer, at the latter's discretion. In either case the re-transfer should be notified to the Registrar General by the County Medical Officer on the form (S.D.7) supplied for the purpose. It is important that full particulars of each change of assignment should be noted on the form, which should be returned promptly. Re-transfers across County or County Borough boundaries may be arranged by the County Medical Officers or the Medical Officers for the County Boroughs concerned and should be similarly notified. Cases of disagreement should be referred to the Registrar General.

It may also happen that a Medical Officer has evidence suggesting that an event that has been treated as non-transferable should, in accordance with the rules set out above, have been transferred out of his area. If such cases are taken up promptly with the Registrar General (in the case of a District Medical Officer, through the County Medical Officer), he will consider the possibility of arranging transfers.

5. Miscellaneous

It should be noted that the deaths tabulated by the Registrar General in his Annual Review are those registered during the calendar year, and it is to these that the notifications relate, not to deaths occurring in the year. The distribution of notifications for the December quarter cannot be made before February of the following year.

GENERAL REGISTER OFFICE,
Somerset House,
London, W.C.2,
October, 1952.

* By special arrangement, Medical Officers of Health for the Metropolitan Boroughs receive, weekly, particulars of deaths transferred to their area from districts in the home counties and the London area.

9. General

See also the Explanatory Notes to the Tables volumes, Parts I and II.

CORRIGENDA

Statistical Review, 1951, Text Volume

- Page 102 Table LII: Males, All Causes,
 Age 1—, 1951, *for* 1, 4 *read* 1,448
 Age 5—, 1939, rate should read 1,356
- Page 267 Proportion of Bodies Seen after Death:
 Col. 1950 in table, *for* 19·0 *read* 16·7; *for* 47·8 *read* 50·0
 Col. 1951 in table, *for* 19·7 *read* 17·3; *for* 48·2 *read* 50·6

Statistical Review, 1952, Text Volume

- Page 8 Table II: Males, Civilian, Age-group 70—,
for —76 *read* —6
- Page 60 Table XXXVII: Decrees Absolute granted (dissolution and nullity), years 1918 to 1930:

Year	<i>for</i>	<i>read</i>
1918	1,082	1,011
1919	1,629	1,654
1920	3,041	3,090
1921	3,458	3,522
1922	2,509	2,588
1923	2,586	2,667
1924	2,249	2,286
1925	2,563	2,605
1926	2,554	2,622
1927	3,124	3,190
1928	3,927	4,018
1929	3,333	3,396
1930	3,482	3,563

- „ Table XXXVII: Divorce Petitions filed (dissolution and nullity), year 1922,
for 2,462 *read* 2,468

- Page 205 Table XCI:
 Line, Other carbon monoxide, 1952.
 3rd Col., *for* — *read* 4; 4th Col., *for* 11 *read* 7
 8th Col., *for* — *read* 10; 10th Col., *for* 28 *read* 18
 Line, Other gases, 1952.
 3rd Col., *for* — *read* 3; 5th Col., *for* 4 *read* 1
 8th Col., *for* — *read* 27; 10th Col., *for* 36 *read* 9

INTRODUCTION

Object of the Text Volume

The primary object of the Text volume is to provide a commentary on those statistics of the period under review which have already been published in the Tables volumes of the Statistical Review. This commentary aims to set the statistics in perspective particularly by drawing attention to trends and significant characteristics which will be a guide to research workers and others concerned with public health and with vital and health statistics. It also seeks to explain the reasons for changes in presentation of the statistics as the interest and the significance of different factors change.

In addition to this primary aim it is necessary to relate the vital statistics of a year to other work in similar fields. In particular, there have been great developments since the war in international discussion and interest in the fields of demography and health statistics ; a reference to the activities of such bodies as the World Health Organization and the Population Commission of the United Nations assists understanding of their influence on work in similar fields in this country and at the same time illustrates the contribution made by this country to their work. Some account of these activities is given herein.

Finally, to complete the story of the year's work, a brief description is added of other activities of the General Register Office. This includes an account of the volume of business in the registration service during the year, a list of committees on which the Registrar General was represented and a list of published contributions by officers of the Department.

Civil and Medical Statistics

The statistical commentary in this volume falls into two main parts corresponding to the division of the Tables volumes into Civil and Medical statistics respectively.

The civil part is concerned in the main with population, births, marriages and divorces. The primary aim here is to show what trends are apparent in post-war experience and to compare them as far as possible with the pre-war tendencies.

The medical part of the volume deals primarily with mortality statistics, but also reflects the increased attention which the Department has given to the study of morbidity in recent years. Figures of notifications of infectious diseases are included in Part I of the Review (Medical Tables). The present volume discusses the numbers of notifications of tuberculosis, and the statistics of cancer registrations.

As a step towards improving knowledge of the illnesses of the population, a pioneer study was begun early in 1951, when a small group of general practitioners started recording, for statistical analysis by the General Register Office, details of consultations by their patients. The results of this enquiry have been published in two special reports.* Plans were subsequently made, in collaboration with the College of General Practitioners, to conduct a similar enquiry based on the records of some 100 practices, which is now proceeding.

* Studies on Medical and Population Subjects:—

No. 7: General Practitioners' Records—An analysis of the clinical records of eight practices during the period April 1951 to March 1952. H.M.S.O., price 8s. 6d. net.

No. 9 (in continuation of Study No. 7): General Practitioners' Records—An analysis of the clinical records of some general practices during the period April 1952 to March 1954. H.M.S.O., price 6s. 6d. net.

As in previous years, the Department is indebted to the Registrar General's Advisory Committee on Medical Nomenclature and Statistics, under the chairmanship of Sir Ernest Rock Carling, for valuable advice and assistance in connexion with the various medical enquiries undertaken by the Department and generally. The list of members of the main Committee and of the Sub-Committees is given in Appendix C (page 247). A report relating to the Committee's work during 1951 and 1952 was published in the 1952 Text volume, and a further report dealing with the years 1953 and 1954 has been published in the Registrar General's Quarterly Return for the December Quarter, 1954 (No. 424).

Population

Availability of the full 1951 Census figures of the population has enabled the estimates of the mid-1953 population by age and sex (see page 7) to be revised in detail retrospectively. The ageing of the population is demonstrated by the increased proportions in the 65 and over age-groups, at which ages the proportion of females has also risen by virtue of their advantage in the general improvement in longevity. Estimates of the population by marital condition have also been based on the final 1951 Census results.

Births and Fertility

There was a slight increase in the number of births in 1953 as compared with 1952. The 1953 figure represented a rate per thousand population of all ages of 15·4 as compared with 15·3 in 1952. The 1953 rate represents a slight upward fluctuation from the persistent though very gradual downward trend which followed the violent movement of the war and immediate post-war years.

Various factors are examined bearing on the question whether the births currently occurring are sufficient to ensure the maintenance of the population at its present level. It is suggested that deductions from the current experience, which, considered in isolation, appears to indicate that the population is more than replacing itself, may be misleading. High marriage rates and earlier marriage ages, combined with a tendency for family building to be done during the earlier years of marriage, have led to an inflation in the current birth figures.

The detailed analysis continues the various features which have customarily formed the subject of comment in recent Statistical Reviews.

Marriages

During 1953 there were 344,998 marriages registered in England and Wales as compared with 349,308 in 1952 and 360,624 in 1951. But, while the incidence of marriage has fallen steadily since 1947 (apart from a small fluctuation in 1951) in relation to the total population, it has not shown any such pronounced trend when considered in relation to the non-married population. The decline in total marriage incidence when related to the non-married population appears to have begun in 1952 but as yet to have been slow and relatively small in extent. Some such decline was to be expected, with the high marriage rates of recent years reducing the marriageable population. But it has not yet appreciably affected the important element of first marriages at young ages. Marriage rates for spinsters were higher in 1953 than in 1952 at ages under 25, though lower above that age, and the average age at marriage was still falling. One reason for the persistent high marriage rates is that, while the ratio of males to females at ages 15-44 in the total population has been rising continuously since 1921, it has risen still more in the non-married section of the population at these ages (see pages 42 and 43).

Divorce and Remarriage

Since the end of the Second World War there have been large fluctuations in the annual number of divorces. In 1953 some 30,000 divorces were made absolute and almost the same number of divorce petitions were filed, suggesting that a stable situation was beginning to develop. Several more years will be needed before the long-term trend can be ascertained.

To ascertain the impact of divorce on the population and on the number of legitimate births, it is necessary to examine the combined effect of the incidence of divorce and of the remarriage of divorced persons. Such consideration suggests that the number of divorced persons who remarry is still rising. In 1953 as in 1952 this was in the region of two-thirds to three-quarters, so that the net loss to the married population was only a small fraction of the total number divorced.

Mortality in 1953

The number of deaths registered in England and Wales in 1953 was 503,529, which was 6,045 more than in 1952. This was due mainly to a mild outbreak of influenza in the first quarter of the year. There was an increase of just over 1 per cent in deaths but, after adjustment for changes in the sex and age constitution of the population, the effective increase in mortality was only 0·1 per cent. The crude death rate was 12·2 deaths per thousand males as in 1952 and 10·7 per thousand females compared with 10·5 in 1952.

Death rates from certain causes at different ages are shown in Table XXXVIII (pages 62-63). In each of the age-groups 1-4, 5-14 and 15-24 accidents were the main cause of death. This table shows that the marked excess of male over female deaths at ages 15-24 can be accounted for very largely by the high mortality among young men from accidents, mainly motor vehicle accidents. Within this age-group the only important cause of death with a marked female preponderance was respiratory tuberculosis. At ages 25-44 cancer was the most important cause of death with the rate for females exceeding that for males. At ages 45-64 cancer was again the most important cause of death with cancer of the lung causing nine times as many deaths among males as among females. At ages over 65 cancer, heart disease and vascular lesions affecting the central nervous system were the important causes.

Infant Mortality and Stillbirths

In 1953 the infant mortality rate was 26·8 and the stillbirth rate 22·4 compared with 27·6 and 22·7, respectively, for 1952. In recent years there has been a marked contrast between the substantial reduction achieved in the death rate for infants of one week and over and the very small decline in the perinatal mortality rate (stillbirths and deaths under one week per 1,000 total births). In 1953 the perinatal mortality rate was 36·9 compared with 37·5 in 1952, representing a decline of approximately 4 per cent since 1948. The death rate among infants aged one week and over was 11·7 per 1,000 total births compared with 12·1 in 1952, a decline of 36 per cent since 1948.

Infectious Diseases

The present volume does not contain a general commentary on the notifications and deaths for the infectious diseases. It contains, however, a discussion of the mortality from meningitis and encephalitis (pages 111-119).

Tuberculosis

In 1953, 5,447 males and 2,466 females died of respiratory tuberculosis. The male deaths were a little more than half and the female deaths rather more than a third of those in 1949. Among men the fall in the death rate from respiratory tuberculosis has been particularly marked in the younger age-groups; the highest rate, which was in the age-group 45-54 during 1931-35 and at ages 55-64 in 1949, was at ages 65-74 in 1953. The maximum rate among women has shifted from the ages 20-24 in 1931 and 1949 to ages 25-34 in 1953.

The highest overall death rates from respiratory tuberculosis amongst the regions and conurbations were experienced in the Merseyside conurbation.

Cancer

During 1953, 45,935 men and 41,989 women died from malignant neoplasms. Deaths from cancer accounted for 17·7 per cent of all deaths for males and 17·2 per cent for females, compared with 17·6 per cent for each sex in 1952. The increase in male deaths was accounted for by the further increased mortality from cancer of the lung, 900 more deaths being assigned to this cause than in 1952. Between 1952 and 1953 mortality from cancer of the lung increased most between the ages of 65 and 84. The volume contains a discussion of variations in numbers of deaths due to cancer of lung according to the degree of urbanisation of the area. Certain groups of rural areas (see below) are shown to have comparatively low death rates from cancer of the lung. Use is made of information collected in the national Cancer Registration Scheme with particular reference to cancer of the uterus (pages 143-145).

Diseases of the Respiratory System

A mild outbreak of influenza in the first quarter of the year led to 6,465 deaths being assigned to this cause compared with the low figure of 1,750 in 1952. The deaths occurred mainly among persons aged 45 years and over. The number of deaths of elderly people attributed to bronchitis continued to decrease and that attributed to pneumonia to increase.

Diseases of the Digestive System

Pages 189-192 contain a discussion of the importance of the diseases of the digestive system as causes of death with reference to difficulties of classification which complicate the interpretation of the figures.

Accidental and Violent Deaths

With the improvement in mortality from diseases, accidents are becoming relatively more important as causes of death. Pages 198-203 elucidate changes in accident death rates since 1950. Total deaths from accidents were higher in 1953 than in the three preceding years. Motor vehicle accidents, suicides and accidental falls were, in that order, the chief causes of accidental and violent deaths in 1953 and considerably exceeded deaths from other accidental or violent causes.

Motor vehicle accidents on the public highways caused the deaths of 3,225 males and 1,021 females in 1953, increases of 7 per cent for both sexes over 1952.

Urbanisation and Mortality

For some years increasing attention has been paid to the variations in mortality in various areas according to the degree of urbanisation, as distinct from the familiar mortality gradient between the North and the South. The death rates from pneumonia at ages 45 and over were highest in the conurbations

and lowest in the rural districts, but between 15 and 44 years this position was reversed. The urbanisation gradient for male deaths from bronchitis was particularly steep. A similar marked gradient was shown for cancer of the lung in men.

The rural districts normally used for vital statistics are those so defined under the Local Government Acts, but an appreciable amount of industry and dense housing is not infrequent in parts of these districts. In order to eliminate as far as possible this semi-urban characteristic, a number of rural districts have been selected by reference to the extent of industrial property and the density of population in the districts and adjacent local authority areas. Mortality figures for these selected areas are discussed on pages 139 and 175. So far as mortality is concerned, urban life appears to impose a greater penalty on men than on women.

International Co-operation in Population and Health Statistics

The seventh session of the Population Commission of the United Nations was held in 1953. The work of the Commission and other international bodies is reviewed on pages 234-239, with especial reference to the "Principles for a Vital Statistics System", a series of recommendations designed to improve and standardise vital statistics. An officer of the Department represents the United Kingdom on the Commission.

The work of the World Health Organization during 1953 is discussed so far as it was related to medical statistics. The General Register Office provided representatives at the Sixth World Health Assembly, and during the year acted as host to the First International Conference of National Committees, etc., on Vital and Health Statistics.

Legislation

Two consolidation measures relating to the work of the General Register Office were passed in 1953, namely, the Births and Deaths Registration Act, 1953, and the Registration Service Act, 1953. These two Acts consolidated, with minor corrections and improvements, existing provisions relating to the registration of births and deaths in England and Wales contained in the Births and Deaths Registration Acts, 1836-1947, and some other Acts. The main statutory provisions affecting the Department are now conveniently contained in these two Acts of 1953 and the earlier consolidation Act, the Marriage Act, 1949.

POPULATION

Population of England and Wales

The estimated population of England and Wales as at 30th June, 1953, is shown in Table I. These figures, and those in Tables III and V, are based on the final tabulations of the 1951 Census ; they have already appeared in the Tables Volume, Part II, of this Review, but are revisions of the estimates published earlier in Part I.

Table I.—Estimated Population of England and Wales, Mid-1953

(Thousands)

	Persons	Males	Females
Total	44,301	21,397	22,904
Civilian	43,541	20,658	22,883
Home	44,109	21,206	22,903

The three different types of population shown are based on different concepts. For the *home* population, all Armed Forces (including Commonwealth and Allied Forces) are treated as resident where stationed. If the whole contribution of England and Wales to the United Kingdom Forces, whether at home or abroad, is included, and Commonwealth and Allied Forces here are excluded, this provides a measure of the *total* population to which England and Wales can lay claim (in this measure merchant seamen and British visitors abroad are excluded but are roughly balanced by visitors to this country who though included are not properly members of the population of England and Wales). If all Armed Forces are excluded this provides the *civilian* population.

Population Movement

The 1953 estimates of total population have been built up from the revised figures for 1952 by the usual process of adding births and immigrants and subtracting deaths and emigrants. The available data on the details of migration have become somewhat meagre since the abolition of the National Register in 1952. In 1953 the continuance of food rationing provided useful information about the volume of movement into and out of the country. Its composition by sex, age and marital condition, needed for the estimates in Tables III and V, was assessed largely on the basis of past experience. Some account was taken of the partial data collected by the Board of Trade and the Home Office. The balance of migration is relatively small in this country at the present time.

The approximate amount and composition of the changes in total population in the year since mid-1952 are shown in Table II.

Table II.—Analysis of Population Movement, 1952-53, and Comparison with 1951-52 and 1946-51

Mid-year to Mid-year		Increase or Decrease (—) in Total Population						
		Total			Births	Deaths	Natural Increase	Net Migration
		Persons	Males	Females				
1952-53	Thousands	135	77	58	680	—521	159	—24
	Per cent	0·31	0·36	0·25	1·54	—1·18	0·36	—0·05
1951-52	Per cent	0·36	0·41	0·32	1·52	—1·10	0·42	—0·06
1946-51	Per cent per annum	0·61	0·67	0·55	1·80	—1·19	0·61	0·00

It will be seen that the increase of 135,000 is, as in most recent years, mainly due to the excess of births over deaths, the migration balance for the year being small in relation to the total change. As compared with the average annual increase over the period 1946-51, the 1952-53 increment is smaller mainly as a result of the decline from the abnormally high annual number of births in the immediate post-war years. A small outward migration balance also contributed to the reduction.

Population Structure by Sex and Age

The revised estimates of the total, civilian and home populations of England and Wales by sex and age as at 30th June, 1953, are shown in Table III.

Table III.—Estimates of Total, Civilian and Home Populations by Sex and Age, England and Wales, Mid-1953

Note.—These are revised estimates based upon the final data by sex and age from the 1951 Census

(Thousands)

Age Group	Males			Females		
	Total	Civilian	Home	Total	Civilian	Home
0- ..		1,734			1,651	
5- ..		1,856			1,772	
10- ..		1,459			1,404	
15- ..	1,409	1,132	1,339	1,381	1,375	1,381
20- ..	1,468	1,183	1,394	1,447	1,437	1,446
25- ..	1,560	1,500	1,544	1,553	1,551	1,553
30- ..	1,670	1,623	1,657	1,692	1,691	1,692
35- ..	1,501	1,467	1,490	1,548	1,547	1,548
40- ..	1,650	1,628	1,645	1,689	1,688	1,689
45- ..	1,606	1,597	1,604		1,661	
50- ..	1,408	1,404	1,408		1,533	
55- ..	1,118	1,117	1,118		1,375	
60- ..	953	953	953		1,228	
65- ..		782			1,068	
70- ..		594			859	
75- ..		382			587	
80- ..		179			304	
85 and over		68			152	
All Ages	21,397	20,658	21,206	22,904	22,883	22,903

Table IV shows the extent to which the 1953 estimates were retrospectively revised. This revision arose from the difference between the final census tabulations by sex and age and those of the 1 per cent sample. The majority of the differences in individual cells are less than 1 per cent of the original figures; larger percentage corrections were made for females at the most advanced ages.

Table IV.—Correction of Population Estimates, England and Wales, Mid-1953
Original Estimate (based on the 1 per cent sample) minus Final Estimate
(Thousands)

Age Group	Males			Females		
	Total	Civilian	Home	Total	Civilian	Home
0— ..		— 1			+ 1	
5— ..		—17			—14	
10— ..		+11			+ 3	
15— ..	+ 4	0	+ 4	+19	+19	+19
20— ..	—12	—17	—19	+ 3	+ 4	+ 4
25— ..	—12	—13	—14	— 9	— 9	— 9
30— ..	— 2	— 2	— 2	— 6	— 6	— 6
35— ..	+ 2	+ 2	+ 3	0	0	0
40— ..	+14	+13	+13	+ 8	+ 8	+ 8
45— ..	+16	+16	+16		— 2	
50— ..	— 5	— 5	— 5		— 3	
55— ..	+20	+20	+20		— 6	
60— ..	+ 4	+ 4	+ 4		— 1	
65— ..		+ 2			— 9	
70— ..		— 6			+ 3	
75— ..		— 2			+ 3	
80— ..		+ 2			— 5	
85 and over		— 2			—12	
All Ages ..	+16	+ 5	+ 7	—27	—26	—26

The proportions of the total population in broad age-groups in 1939 and 1953 are shown in the following statement. The development of the ageing process resulting from the decline from the high fertility of the late nineteenth century and from improving longevity is illustrated by the progressive increase in the proportion in the 65 and over age-groups. In 1901, when the population structure had been rendered youthful by the antecedent period of high fertility, this proportion was only 47 per thousand. By 1939 it had increased to 89 and in 1953 it was estimated to be 112 per thousand. Between 1939 and 1953 the total proportion in the working age-group 15-64 decreased from 701 to 665 per thousand and this segment of the population as a whole aged, the proportion over 45 having increased while the proportion under that age decreased. The proportion of children was higher in 1953 than in 1939 as a result of the high birth rates of the immediate post-war years.

Sex and Age Group						Per thousand of Total Population	
						1939	1953
Under 15, Males and Females						210	223
15-44	Males					234	209
	Females					241	210
45-64	Males					104	115
	Females					122	131
65 and over, Males and Females						89	112
Total						1,000	1,000

The following summary shows the changes which have taken place in sex ratios at different ages. The ratio of females to males in the total population of all ages is not different from that of 1939, but the excess of females is confined to the higher ages.

Females per 100 Males

Mid-year	All Ages	Under 15	15-24	25-34	35-44	45-64	65 and over
1939	107	98	98	102	110	117	134
1953	107	96	98	100	103	114	148

Factors contributing to this change are the smaller war losses in 1939-45 as compared with those in 1914-18, and the reduction in the volume of predominantly male net emigration after World War I. The rise in the sex ratio at birth and the decline in child mortality have also played a part. The increase in the excess of females at ages 65 and over is due partly to the fact that the generations most depleted of males by the 1914-18 war losses and by the heavy emigration before 1914 have now moved into this age-group, and partly to the greater improvement in the longevity of females as compared with males.

Marital Condition

Estimates of the population at mid-1953 by marital condition as revised following the final tabulations of the 1951 Census are shown in Table V.

Table V.—Estimated Total Population by Sex, Age and Marital Condition, England and Wales, Mid-1953

Note: This is a revised estimate based upon the final data by sex and age from the 1951 Census.

(Thousands)

Age Group		Persons	Males				Females			
		All Conditions	All Conditions	Single	Married	Widowed and Divorced	All Conditions	Single	Married	Widowed and Divorced
0-	..	3,385	1,734	1,734	—	—	1,651	1,651	—	—
5-	..	3,628	1,856	1,856	—	—	1,772	1,772	—	—
10-	..	2,863	1,459	1,459	—	—	1,404	1,404	—	—
15-	..	2,790	1,409	1,402	7	—	1,381	1,322	59	—
20-	..	2,915	1,468	1,115	351	2	1,447	717	727	3
25-	..	3,113	1,560	536	1,016	8	1,553	319	1,219	15
30-	..	3,362	1,670	299	1,351	20	1,692	226	1,425	41
35-	..	3,049	1,501	193	1,282	26	1,548	186	1,305	57
40-	..	3,339	1,650	172	1,444	34	1,689	212	1,395	82
45-	..	3,267	1,606	154	1,413	39	1,661	241	1,310	110
50-	..	2,941	1,408	125	1,231	52	1,533	226	1,140	167
55-	..	2,493	1,118	85	975	58	1,375	206	931	238
60-	..	2,181	953	71	800	82	1,228	189	715	324
65-	..	1,850	782	64	609	109	1,068	164	506	398
70-	..	1,453	594	49	413	132	859	134	316	409
75 and over		1,672	629	51	320	258	1,043	172	207	664
All Ages	..	44,301	21,397	9,365	11,212	820	22,904	9,141	11,255	2,508

The proportion married in the total population rose between 1939 and 1953 from 48 to 52 per cent among males and from 45 to 49 per cent among females. At ages 25-29 the proportions married have risen from 54 to 65 per cent among males and from 65 to 78 per cent among females. This striking change is a consequence of the high marriage rates of post-war years and of a reduction in the average age at marriage, matters which are discussed in more detail in the Marriage chapter.

Estimates of married women by age and marriage duration are referred to in the Fertility chapter.

Local Populations

Estimates of the home populations of all boroughs, urban and rural districts in England and Wales as at the middle of 1953 are shown in Table 12 of Part I and Table E of Part II. The Appendices to Parts I and II give details of changes in boundary during the year.

These local estimates are derived from those of 1951 and 1952, based on the preliminary results of the 1951 Census, as the final census tabulations did not become available in time. They differ in character from the census figures of enumerated population, since they relate to the population usually resident in each area. The nature of this difference, and the method of allowing for it, are discussed in the 1952 Text Volume, page 11.

The main element of population change from one year to another in local areas is internal migration, i.e. movement between different areas within the country. In 1953 there were useful statistics of the mass re-issue of food ration books, but the amalgamation of the 1,472 administrative areas of England and Wales into 322 groups for Food Office purposes limited their value. Reliance was therefore placed, in addition, on information provided by local authorities about new housing in each area, both in general and where the occupants were known to have come from a different area (e.g. in New Towns and certain housing estates). Regard was also had to the changes in the annually compiled registers of parliamentary electors. There is an inevitable decline in the accuracy of estimates as they get further away from the last census, but fortunately the population change in the great majority of areas is so small in any one year that any errors are unlikely to reach serious proportions for a few years yet. A detailed examination of the errors which had accumulated before the 1951 Census was given in the Text for 1951 (pages 14-17).

Local Age Distributions

The estimates of the 1953 home population by sex and age in Standard Regions, Conurbations and Density Aggregates shown in Table 2 of Part I have been derived from those for preceding years, described in the Text Volumes for 1946-50 (Civil) and 1951. In Table A4 of Part II they have been roughly adjusted to the revised estimates by sex and age for England and Wales as a whole, based on the final 1951 Census tabulations. The final census tabulations by sex and age for the various areas were not available in time to make a complete revision of Tables 2 and A4 before those for 1954.

The estimates of the number of children under 15 years of age in Administrative Counties, County and Metropolitan Boroughs as at mid-1953 have been published in the Registrar General's Quarterly Return No. 421 (1st Quarter of 1954), page 36. They are mostly based, for children under 5, on the number of births in each area in the preceding 5 years, and for those aged 5-14, on the number of children of those ages on school registers, figures of which have been made available by the Ministry of Education. Both kinds of data are adjusted in the light of those available for 1951 from census and other sources.

Population Projections

The table in Appendix B of Part II shows the total population of England and Wales by sex and age, projected forward from the (unrevised) estimate at 31st December, 1953, to the end of 1958, 1963, 1968, 1973, 1983 and 1993 respectively.

It has been prepared by the Government Actuary's Department in consultation with the General Register Office on the basis of assumptions agreed between the two Departments and stated at the head of the table. These include a future decline in mortality broadly in accordance with past experience, some decline in the number of births and no net migration.

The nature of a population projection depends primarily on the assumptions made, the implications of which are brought out in the results. Whole sets are sometimes made on different hypotheses in order to explore the range of future possibilities. Specific requests received have generally been for single projections as a help to planning administrative actions and policies, based on assumptions which represent an objective attempt by those familiar with demographic developments to formulate a view of the most likely future conditions. In any discussion of the figures this purpose has to be kept in mind. Those for the short and medium term—say, up to 15 years ahead—are not likely to be affected significantly by other reasonable views of future conditions. Those for somewhat longer periods are bound to be more speculative, though it may still be expedient to make them for what they are worth.

The table in Part II shows an expected increase in the total population of England and Wales from about 44.4 millions at the end of 1953 to about 46.6 millions in 1983, a rise of about 5 per cent in 30 years. But this increase would occur at a rate diminishing from $\frac{1}{4}$ per cent per annum in the early years to 0.1 per cent per annum in the decade 1973-83, and would become a small decrease by 1993.

The ratio of males to females in the population would rise steadily from 94 to 97 per cent in the 40 years to 1993.

The proportion of children under 15 years of age, 22 per cent in 1953, would decline a few years later, as the survivors of the numerous births of the immediate post-war years became older, and would become fairly steady at about 20 per cent. The proportion of people of pension age, on the other hand, i.e. males 65 and over and females 60 and over, shows a continuous rise from 14 per cent in 1953 to 19 per cent 30 or 40 years later. This is due partly to falling mortality, but especially to the moving up into the highest age-groups of the survivors of those born at the turn of the century, when births were at their maximum. The proportion of people at working ages (taken as 15-64 for men and 15-59 for women) would decline only very slightly, from 64 to 62 per cent, and there would be very little change in the broad age composition of their group, as measured by those under and over age 45 (about two-thirds and one-third respectively). This is also reflected in the proportion of women at the childbearing ages 15-44 in the population, which was 21 per cent in 1953 and would remain at about 20 per cent throughout the projection period.

BIRTHS, FERTILITY AND REPRODUCTIVITY

Live Births

The number of live births occurring in 1953 numbered 684,372 compared with 673,735 in 1952. Until 1938, statistics of birth registrations only were available but in most years the numbers of occurrences and of registrations were not different for all practical purposes and the registrations of 1938, numbering 621,204 may be compared with the occurrences of 1953. The births of 1953 represented a rate per 1,000 population of all ages of 15·4, compared with 15·3 in 1952 and 15·1 in 1938. [Tables B and C of Part II]. The 1953 rate represents a slight upward fluctuation from the persistent though very gradual downward trend which followed the violent movement of the war and immediate post-war years.

A similar situation exists in many other countries as is shown by Table Q, which compares the rates of European and some other countries during the last thirty years. In 1953, England and Wales together with Germany had the lowest birth rate but two of all the countries in the table, Sweden having the lowest but one and Austria the lowest. Crude birth rates, however, do not permit a true appreciation of current fertility trends and levels for reasons which are explained below and they should be regarded as only very rough guides.

Birth Rates per 1,000 Women aged 15-44

Since only a fraction of the population are capable of childbearing, it seems more appropriate to relate births not to the total population but to the childbearing component only, for this purpose assumed to be composed of women of ages 15-44. The proportion of these women in the total population has been decreasing for many years, and the crude birth rate has therefore been progressively reduced by the inclusion in the denominator of an increasing proportion of the population not at risk of childbearing.

Table VI gives live birth rates per 1,000 women aged 15-44 and the ratios of these rates to that of 1938. In census years the ratio standardised for age is also shown, i.e. after correcting for changes in age structure of women *within* the age-group 15-44, though this is an unimportant correction and has little effect on the ratios.

Table VI.—Live Birth Rates per 1,000 Women aged 15-44: 1841 to 1953, England and Wales

Year	Live Births per 1,000 women aged 15-44	Ratio to 1938 (taken as 100)		Year	Live Births per 1,000 women aged 15-44	Ratio to 1938 (taken as 100)		
		Direct (Unstandardised)	Standardised for age					
Long Range (3-year averages)				Individual Years or Annual Average				
1841	..	148·3	238	—	1938	..	62·2	100
1851	..	149·8	241	—	1939-49	..	71·5	115
1861	..	151·1	243	—				
1871	..	155·7	250	—	1946	..	83·3	134
1881	..	147·7	238	235	1947	..	90·6	146
1891	..	129·8	209	205	1948	..	80·2	129
1901	..	114·8	185	179	1949	..	76·0	122
1911	..	98·3	158	155	1950	..	73·0	117
1921	..	90·9	146	147	1951	..	71·6	115
1931	..	64·3	104	102	1952	..	71·8	115
1951	..	72·1	116	117	1953	..	73·5	118

In the left-hand side of the table, giving rates for the average of 3 years round each census year since 1841, the highest rate is associated with 1871, a rate no less than two and a half times that of 1938. The rates then decline to 1931, when the rate was substantially the same as that of 1938.

From the figures shown in Table VI above, it would appear that the decline was first retarded in the decennium 1911-1921 but in fact this was due to the exceptionally high birth rate in 1921—the making good of postponed births after the war of 1914-18. The underlying trend was still downward. After 1931 the rate declined slowly to 59·4 in 1933, or 95 per cent of the 1938 rate, and then rose slightly to 62·2 in 1938. The rise from 1933 to 1938 was itself small, but the change in trend was important coming as it did after such a prolonged decline; and it is believed that it marked a significant change in social attitude toward family building.

The intervention of war again in 1939 produced fluctuations in the rate, and the long-term trend has been made clearer by aggregating the experience of the war and post-war years to yield an average rate of 71·5 for the period 1939-1949 as a whole, or 15 per cent higher than the 1938 rate. The rate for 1950 was very slightly higher than this at 73·0 but the rates for 1951 and 1952, 71·6 and 71·8, were close to the 1939-1949 average. The rate for 1953 is higher at 73·5 but does not signal a significant departure from the comparatively stable level of the previous three years.

As a result of the declining proportion of the population represented by women of the reproductive ages, crude birth rates tend to give a less favourable picture of fertility than is justifiable. When births are related to women of reproductive ages it becomes clear that fertility in 1953 was 18 per cent higher than in 1938 and that even in 1951 and 1952 it had not fallen below a level 15 per cent above that of 1938.

Age-Standardisation

A further refinement may be introduced into the analysis by recognising that the fertility of women varies with age between 15 and 45. Since only a small proportion of girls under 20 are married their birth rate is low, but otherwise the rates are higher at younger than at older ages. The ageing of the population has added weight to the older groups and has tended to reduce the average fertility of the age-group 15-44 taken as a whole.

The left-hand section of Table VI, giving 3 year averages around census years, shows both unstandardised and standardised ratios of the rate to that of 1938. As at 1881 the effect of this standardisation was to reduce the ratio from 238 to 235 and, for 1931, from 104 to 102. At 1951, however, the effect was to increase the ratio, from 116 to 117. Thus the improvement from 1931 to 1951 is only 12 per cent as shown by the unstandardised ratio, but 15 per cent as shown by the standardised ratio. While these adjustments are shown for completeness it is nevertheless obvious that the general trend of the fertility rates is not affected to any significant extent by age-standardisation.

Reproduction Rates

Unless in the long run deaths are replaced by births (or by an inward migration balance) the size of the population must change; and attention has become focused upon replacement, i.e. upon considering whether a generation of women in passing through the reproductive years of life might bear sufficient female babies to replace themselves and thus to enable the same cycle of replacement to continue.

A simple index can be obtained by calculating fertility rates based on female births at each age (in practice in quinary groups) and adding these together to estimate the average number of female babies born to women passing through

the reproductive ages assuming they experience these fertility rates—this is the Gross Reproduction Rate (G.R.R.). This takes no account of the mortality of infants before they themselves become the parents they are supposed to replace. Therefore before the rates for each age-group are added together they should each be multiplied by the appropriate proportion of infants surviving to that age-group. If this calculation is made on the basis of current mortality experience, it yields the Net Reproduction Rate (N.R.R.).

These reproduction rates suffer from a number of statistical defects but there is an overriding difficulty of interpretation which has tended to bring them into disrepute. Exact replacement is only indicated if rates of unity are consistently yielded and if the assumed conditions of mortality and age variations in fertility are reproduced in the future. In turn this involves other assumptions of stability in marriage experience, in the sex ratio at birth and birth spacing. These conditions are never fulfilled. The rate is a convenient method of summarising the experience of a single calendar year (and as such is not to be derided) but this is an experience to which a number of separate generations of women contribute and in so far as these generations are already at different stages in their child-bearing career the probable outcome in relation to the separate generations is obscured. Replacement cannot therefore be properly assessed by reproduction rates. Even a series of rates indicates only past trends and gives no reliable guide to the future in which rapid changes in conditions might take place. The rates are likely to undergo fluctuation from year to year and may even be subject to movement persisting over a period of years without providing a sure guide to ultimate population growth.

Approaches have been made to the problem of assessing replacement by measuring family sizes attained at different durations of marriage for couples married at different times in the past, or by calculating the ratio of successive generations. Though these are more satisfactory measures of replacement, they are by this same token retrospective measurements of past fertility in which current experience carries little weight.

Gross and Net Reproduction Rates for England and Wales are shown in Table VII.

Table VII.—Gross and Net Reproduction Rates, 1841 to 1953, England and Wales

Year	Reproduction Rates		Ratio of N.R.R. to G.R.R.	Year	Reproduction Rates		Ratio of N.R.R. to G.R.R.		
	G.R.R.	N.R.R.			G.R.R.	N.R.R.			
3-year Averages				Single years					
1841	2·237	1·349	0·603	1938	0·897	0·805	0·897
1851	2·264	1·381	0·610	1939	0·892	0·807	0·905
1861	2·277	1·427	0·627	1940	0·850	0·753	0·886
1871	2·356	1·511	0·641	1941	0·836	0·737	0·882
1881	2·252	1·511	0·671	1942	0·934	0·845	0·905
1891	1·973	1·369	0·694	1943	0·985	0·893	0·907
1901	1·702	1·238	0·727	1944	1·089	0·993	0·912
Single years									
1911	1·424	1·118	0·785	1945	0·992	0·910	0·917
1922*	1·189	0·991	0·833	1946	1·200	1·112	0·927
1931	0·922	0·801	0·869	1947	1·307	1·214	0·929

* 1922 has been selected since, as the aftermath of the First World War, conditions in 1921 were abnormal.

It is perhaps best to regard these rates as having very much the same properties as annual birth rates and to consider them as such. The G.R.R. is superior to a crude birth rate since it relates births to the section of the population conventionally taken as responsible for them. Birth rates per 1,000 women aged 15-44, employed above, also possess this superiority, but the G.R.R. has a further advantage in that it is age-standardised. The N.R.R. has both these properties, and in addition it incorporates an allowance for the wastage of mortality between birth and prospective motherhood.

The G.R.R. in 1841 was 2.237 and nearly 150 per cent above that of 1938. The close agreement between this excess and that shown in Table VI will be noted. The rate at that time was rising slowly and after passing a peak in 1871 commenced a long decline which was not arrested until after 1931, by which year it had fallen to 0.922. Between 1931 and 1938 there was little movement in the rate. The G.R.R. fluctuated widely in the next 11 years, as did more conventional birth rates, its average for the period 1939-49 being 1.031. Its value in 1951 was 1.044 and in 1952 was 1.052, reflecting relative stability as war disturbances receded. The 1953 rate was 1.076.

The introduction of the element of mortality which has improved so much has an important effect on the shape of the long-term changes. The N.R.R. in 1841 was 1.349, barely one-half of the G.R.R. and only 68 per cent above the 1938 rate, showing that the contemporary high mortality losses between birth and attainment of reproductive ages were such that a much higher birth rate was required to replace the mothers of that time than was required in 1938. After 1841 the N.R.R. followed a course similar to that of the G.R.R., but with the rate of decline much retarded by the improving mortality. By 1931 the N.R.R. had fallen to 0.801, and in 1938 it was not significantly different at 0.805. The average N.R.R. for 1939-49 was 0.945. In 1951 the rate was 0.996, in 1952 1.008, and in 1953 1.032.

It is interesting to note the effect of mortality improvement since 1938. The average G.R.R. for 1939-49 was 15 per cent above 1938 whilst the average N.R.R. was 17 per cent above 1938. In 1953 the G.R.R. is 20 per cent above the 1938 level and the N.R.R. 28 per cent above. Thus, the contribution of current births to the provision of potential mothers in the future, already increased by 20 per cent above that of 1938 by virtue of improvement in fertility rates, has been increased by a further 8 per cent as a result of reduction in the mortality wastage between birth and reproductive ages.

The last columns of the two halves of Table VII show the ratio of the N.R.R. to the G.R.R., an index of the changes in mortality wastage discussed above. In 1841 nearly 40 per cent of the reproductive potential of girls was lost by their premature death. At the turn of the century the loss was still over 25 per cent. In the next 30 years the loss was halved, falling from over 25 per cent to under 15. By 1938 the loss had been brought even lower to 10.3 per cent. Still further improvement in the following 15 years halved the losses again to 4.1 per cent in 1953. It can be seen that further gains from mortality can be but slight, since the losses which can be removed are so small. Thus, whilst the mortality gains in the last hundred years have contributed much to maintaining replacement, little help can be expected in the future from this source, and another decline in fertility rates, such as that in the early years of this century could not take place without damage to replacement prospects. However, judgement must be suspended: for while the fertility decline from the post-war peak has left the N.R.R. still in the region of unity it remains for the records of the next few years to reveal the true post-war trend. It has to be borne in mind that the very youngest generations involved in the reproduction rate were married at earlier ages than the older generations and that, to the extent that they will complete their family building earlier, they will have lower fertility rates at older ages than are assumed in the

reproduction rate. This means that the reproduction rate has been temporarily inflated by earlier marriages and true replacement may turn out to be appreciably below unity.

Age, Duration and Parity

Revision of Tabulation Design

As from 1952 a number of important changes were made in the form of the tables in the Statistical Review which provide the annual fertility analyses based upon information obtained under the Population (Statistics) Act, 1938.

Tables AA to EE of Part II of the Review are, with a few modifications, similar to the corresponding tables in the previous series. Table FF (previously GG) now includes live and stillbirth rates per 1,000 legitimate maternities. Tables RR, SS and TT correspond to those previously designated VV, XX and YY. The former Table WW is discontinued.

A new table (Table GG) shows birth rates by age of mother for Standard Regions, Conurbations and Density Aggregates; it also includes legitimacy, sex and stillbirth proportions which were formerly given in Table HH.

The analysis of legitimate maternities by mother's age, marriage duration and previous liveborn children in Tables HH, II and LL, is confined to maternities to women married once only. This restriction was made necessary by the continued poor quality of data in respect of women married more than once. Thus the 1952 records for almost a third of such women were incomplete in respect of one or more of the fertility particulars as compared with a trivial proportion (about $\frac{1}{2}$ per cent) of women married once only. The maternities excluded by this restriction are of marginal importance since they represent a very small fraction of the total (about 3 per cent) and the small fertility differential associated with second and subsequent marriages has an insignificant effect upon the total national experience. Table MM relates to legitimate maternities to women married once only, distinguishing parity, age and year of marriage for successive marriage cohorts.

Tables JJ and NN show estimates of the numbers of married women (married once only) at risk of childbearing in the calendar year (*a*) according to age and duration of marriage and (*b*) according to age at marriage and year of marriage. There is a fundamental difference between the figures in these tables. Table JJ is required for the production of legitimate maternity rates per year of risk (shown in Table KK) and each married woman exposed to risk for a fraction of a year only counts as this fraction. Table NN is required for the production of legitimate maternity rates per married woman (shown in Table OO, and subsequently accumulated to show average family size in Table PP) and each married woman exposed to risk at any time in the calendar year counts as a full unit.

In Tables AA, HH, II, LL and MM, the "not stated" cases have been proportionally distributed and included with the "stated" cases. Table QQ shows the numbers of cases so distributed and the proportions per 10,000 total legitimate maternities. Cases where the number of liveborn, now dead, children was not known by the informant at the registration of the birth have not been treated as "previous children not stated" since the current level of child mortality is sufficiently low to permit it to be assumed without risk of serious error that in these cases there were no such children.

A change has also been made in the method of identifying marriage duration in order to secure better correspondence with the completed month or year descriptions in the column headings of the tables, and the qualifications imposed prior to 1952, viz. that the actual durations were approximately half a month less than those indicated by the tables, is no longer operative.

Owing to the complexity of tabulations involving identification of legitimacy, age of mother, duration of marriage, number of previous children and various combinations of those factors, it is not practicable or economical to provide completely parallel classifications of both births and maternities. The tabulations provide full analyses by the two factors of legitimacy and mother's age for both births and maternities (Part II, Tables AA to FF and TT), but the legitimate fertility tabulations involving duration of marriage or number of previous children are restricted to maternities (Tables HH to OO and QQ). Maternities are slightly greater in number than the corresponding number of live births (stillbirths included in the former being in excess of the plural births excluded) but the excess is small and the maternity tabulations can be converted to live birth tabulations with sufficient accuracy for most purposes by the application of the appropriate live birth-maternity ratios. Ratios for 1938 to 1952 have been shown in previous texts, and for 1953 are shown below in Table VIII.

Table VIII.—Ratio of Legitimate Live Births to Legitimate Maternities by Mother's Age at Maternity, 1953, England and Wales

Calendar Year	Mother's Age at Maternity						
	All ages	Under 20	20–	25–	30–	35–	40 & over
1953	0·991	0·989	0·991	0·993	0·993	0·985	0·964

Incomplete Statement at Registration

The records of successive years have been subject to varying degrees of incompleteness through the occasional failure to obtain at birth registration a record of the mother's age, duration of marriage, or the number of her previous children. The proportion of "not stated" cases of various types in the records for the year 1938, the first of the series, and for the years 1945 to 1953 are given in Table IX.

Table IX.—"Not Stated" cases per 10,000 Total Legitimate Maternities, 1938, 1945 to 1953, England and Wales

Type of information <i>not stated</i>	1938	1945	1946	1947	1948	1949	1950	1951	1952*	1953*
Age only	20	20	20	19	17	19	18	16	14	14
Age and duration	5	3	3	3	2	2	2	2	5	6
Age and children	—	—	—	—	—	—	—	—	—	—
Age, duration and children	25	11	10	13	8	6	6	6	—	—
Duration only	89	40	41	34	27	22	21	24	32	30
Children only	44	32	25	30	27	24	20	19	—	—
Duration and children ..	7	6	7	3	3	4	3	3	—	—
Total, all types ..	190	112	106	102	84	77	70	70	51	50
All age types	50	34	33	35	27	28	26	24	19	20
All duration types	125	60	61	53	39	34	32	35	37	36
All children types	76	50	42	46	38	34	29	28	—	—

* For the years 1952 and 1953 the figures relate to women married *once only*.

In 1938, the first year of the operation of the Population (Statistics) Act, the additional information required by that Act was deficient in 1·9 per cent of total registrations of legitimate births, but by 1951 the deficiency had fallen to 0·7 per cent. Restricting the tabulations in 1952 and 1953 to women married once only can be seen to have had the effect of reducing the deficiency still further to 0·5 per cent. The date of marriage, from which the duration of marriage is obtained, has been the most frequent item of information omitted but such omissions have become much less frequent of recent years, falling from 1·25 per cent legitimate maternities in 1938 to only 0·36 per cent in 1953.

The number of previous children was omitted for 0·76 per cent legitimate maternities in 1938, but the proportion had fallen to 0·28 in 1951 and in 1952 and 1953 for women married once only there were effectively no omissions. The frequency of omissions of mother's age was 0·5 per cent in 1938, but only 0·24 in 1951 on the old tabulation basis and 0·2 in 1953 on the new.

There is no reason to suppose that the omissions were generally intentional or prejudiced and therefore as already stated above it has been considered justifiable to incorporate in tables AA, HH, II, LL and MM a proportional distribution of the "not stated" amongst the "stated" cases as being the more convenient form of presentation.

Illegitimate Births and Pre-marital Conceptions

Of the 684,372 live births which occurred in 1953, 32,503 or 4·7 per cent were registered as illegitimate compared with an average of 5·4 per cent in the post-war years from 1946 to 1951, an average of 6·2 per cent over the war period 1939-1945, and an average of 4·2 per cent in the pre-war years from 1935 to 1938. The proportion of births that were illegitimate, after having been stable for many years, rose during the war to some 50 per cent above the pre-war level. Since the war the proportion has declined, but in 1953 it was still 12 per cent above the pre-war figure.

The numbers of illegitimate births registered from 1851 are published in Table B of Part II and rates in Table C.

Attention has been drawn in previous commentaries to the fact that legitimate but pre-maritally conceived births and illegitimate births are complementary from the aspect of extra-marital sexual behaviour, and should be considered together. Tabulations of legitimate births by duration of marriage are not made, but tabulations of maternities are available and enable the necessary statistical analysis to be carried out. For 1952 and 1953 the number of maternities occurring within 9 months of marriage are taken to indicate the number pre-maritally conceived. Prior to 1952 for convenience of tabulation it was considered permissible to take the dividing line at approximately $8\frac{1}{2}$ months.

Table X shows the numbers of illegitimate and pre-maritally conceived maternities for each year from 1938 (when tabulations by duration of marriage were first made) to 1953. As an indication of the effect of the change in duration tabulation in 1952 it may be stated that on the new basis the 1951 percentage in column (5) would be raised from 12·3 to 13·0 by the addition of one-half month's maternities.

Table X.—Illegitimate maternities and pre-maritally conceived legitimate maternities, 1938 to 1953, England and Wales

Year	Illegitimate maternities	Pre-maritally conceived legitimate maternities	Total maternities conceived extra-maritally		Percentage of extra-maritally conceived maternities legitimated by marriage of parents before birth of child
			Numbers	Per cent of all maternities	
(1)	(2)	(3)	(4)	(5)	(6)
1938	28,160	66,221	94,381	14·6	70·2
1939	26,569	60,346	86,915	13·8	69·4
1940	26,574	56,644	83,218	13·7	68·1
1941	32,179	43,362	75,541	12·7	57·4
1942	37,597	40,705	78,302	11·8	52·0
1943	44,881	37,271	82,152	11·8	45·4
1944	56,477	37,746	94,223	12·3	40·1
1945	64,743	38,176	102,919	14·9	37·1
1946	55,138	43,488	98,626	11·8	44·1
1947	47,491	59,633	107,124	12·0	55·7
1948	42,402	62,304	104,706	13·4	59·5
1949	37,554	59,185	96,739	13·1	61·2
1950	35,816	54,188	90,004	12·8	60·2
1951	33,444	50,477	83,921	12·3	60·1
1952	33,088	* 50,740	83,828	12·3	60·5
1953	33,083	50,266	83,349	12·1	60·3

* From 1952 onwards the figures relate to women married *once only*.

It has been pointed out in previous commentaries that, as the incidence of illegitimate maternities increased at the onset of war [shown in column (2) of the table], the incidence of pre-maritally conceived legitimate maternities decreased [shown in column (3)], and the sum of the two [shown in column (4)] suffered much less fluctuation than either of its components. It is likely that physical separation and other disturbances of the war prevented or militated against the marriage of the couple after conception but before the birth and produced an apparent shift of a substantial number of maternities from the pre-maritally conceived legitimate category to the illegitimate category during war and immediate post-war years. It therefore seemed reasonable to expect that, when war conditions passed, a return would be made to the pre-war pattern. From column (6), which shows the proportion of extra-marital conceptions followed by the marriage of the parents before the birth of the child, it may be seen, however, that the proportion was steady at 70 per cent before the war, and that after the war-time disturbance had passed it settled in 1948 at 60 per cent. It was shown in the Text for 1951, page 27, that this difference in levels was mainly due to considerable reductions in the proportions at ages above 20, especially at ages 25-34.

Extra-maritally conceived maternities related to the population at risk, viz: unmarried females including those married after conception, are shown in Table XI with distinction of mother's age. To facilitate the comparison of the 1952 rates with those of previous years, an additional column for 1951 has been provided showing the rates that would have been produced in that year if the duration tabulations had been on the revised basis adopted in 1952.

Table XI.—Extra-maritally conceived maternities per 1,000 unmarried females, 1938 to 1953, England and Wales (*see text*)

Age of Mother	1938	1939	1940-1945 Average	1946	1947	1948	1949	1950	1951	1951 Adjusted (on 1952 duration basis)	1952	1953
15-	12.0	12.1	11.1	11.4	12.6	14.3	15.5	15.2	14.6	15.0	15.1	15.6
20-	37.1	36.5	36.5	42.3	49.7	50.8	47.4	44.7	42.8	46.3	46.4	47.8
25-	27.6	26.6	34.5	44.3	50.6	47.5	40.9	41.4	38.7	41.6	39.1	39.2
30-	16.0	15.8	23.2	33.6	35.3	33.4	32.7	29.7	30.6	32.1	28.5	29.6
35-	10.6	10.0	13.0	17.9	18.9	18.5	18.1	17.6	17.0	17.5	16.2	16.0
40-	4.2	4.0	5.2	6.0	6.2	6.0	5.8	5.4	5.7	5.8	5.3	5.4
15-44 ..	19.8	19.0	20.8	25.0	28.1	28.3	26.8	25.6	24.7	26.2	25.4	25.8
Ratio to 1938:												
Crude ..	1.00	0.96	1.05	1.26	1.41	1.42	1.35	1.29	1.25	1.32	1.28	1.30
Age Standardised	1.00	0.98	1.07	1.28	1.45	1.46	1.39	1.34	1.29	1.36	1.33	1.39

The highest rates are for women aged 20-24 and 25-29. Before the war the highest rate was clearly that of the 20-24 age-group, but since the war the difference between this and the succeeding age-group has narrowed considerably, indeed in 1946 and 1947 the rate was actually higher in the older of the two groups.

The increases in the rates at ages over 30 as compared with 1938, although considerable, are not as important from the point of view of the resulting increase in the numbers of extra-maritally conceived maternities as the much smaller increases at the younger ages, the assumed population at risk at ages over 30 being only some 25 per cent of the total aged 15-44.

It should be borne in mind that the population actually involved in the production of these extra-marital conceptions is not determined merely by age and marital condition. It is significant that the rates have risen as the proportions of unmarried persons in the younger age-groups of the population have fallen; and it may well be that the true population at risk is mainly a hard core of less responsible persons whose numbers are not closely related to the total size of the unmarried population, nor diminished by the high marriage incidence of recent years. To this extent the age rates are fallacious and greater emphasis should be placed upon actual numbers of extra-marital conceptions which have been gradually declining, both absolutely and in relation to total maternities.

In 1953 68 per cent of the illegitimate and 95 per cent of the legitimate extra-marital maternities, i.e. a total of 84 per cent of all pre-marital conceptions, related to mothers under the age of 30.

Legitimate Births and Fertility

Of the total live births which occurred in 1953, 651,869 were registered as legitimate, compared with 693,611; 661,847; 644,758 and 641,186 in the years 1949 to 1952 respectively, and 594,825 in the last pre-war year, 1938.

The purpose of this section, however, is not merely to confirm the broad trend of fertility, already indicated in earlier paragraphs, but to draw attention to the salient features of fertility experience which are relevant only to married women and for whom alone the essential statistics are available. It is important to emphasise that too much should not be read into the apparent stabilisation of the annual number of legitimate live births above that of 1938, since there have been sharp and non-recurring changes in the associated population at risk in consequence of changes in marriage experience.

It is customary to relate childbearing to women of ages 15-44, and legitimate births to the married women within these ages. Owing to the high marriage rates of the last 15 years, to which attention is drawn in the marriage section of this commentary, the number of married women aged 15-44 in the population is higher than ever before, although the number of women of all marital conditions of these ages has been declining, as the following summary statement shows:

				Women enumerated aged 15-44		Proportion married
				All marital conditions (thousands)	Married (thousands)	
1931 Census	..	..	..	9,825	4,917	50 per cent
1951 Census	..	..	..	9,486	6,135	65 per cent

Thus the current legitimate live birth experience, when related to the number of married women at risk, as in the following statement extracted from Table C of Part II, compares less favourably with similar rates for the pre-war period than do rates based upon all births and all women without regard to marital condition.

Year	1938	1946	1947	1948	1949	1950	1951	1952	1953
Legitimate live birth rate per 1,000 married women aged 15-44 ..	110.0	128.7	139.7	121.7	114.4	108.6	105.4	104.5	106.3

The rate, though recently declining more slowly than immediately after the peak year of 1947, has nevertheless fallen below the level of 1938. The average rate for 1951-53 was 4 per cent below that of 1938.

The analysis of legitimate fertility must take account of differences in birth rates of women of different ages (within the range 15-44) and of different durations of marriage.

Despite the fact that generations of girls moving up into the reproductive age-group are smaller than formerly (as a result of the fall in fertility in earlier years) their higher marriage rates have replenished the *married* population at these ages by numbers exceeding the loss from the larger generations passing out of the age-group at upper extreme of age. Any comparison of current fertility with that of earlier years must therefore take into account the facts that married women within the reproductive age-group are, as a group, younger than formerly; and that, owing to the reduction in the average age at marriage, married women of

any particular attained age have been on the average married longer than their predecessors. Of these two factors the first tends to elevate, and the second to lower, the crude fertility rate; and since the durational influence is the more powerful, the net effect is to slightly depress the crude rate. This rate based on legitimate maternities to all married women aged 15-44 was 106.3 per 1,000 in 1953 and even though slightly depressed by recent marriage experience was not below the level established in the last two or three years.

Legitimate Fertility by Mother's Age and Duration of Marriage.

Fertility declines with advancing age of mother and also with lengthening duration of marriage, and for proper comparisons between the fertility experiences of successive years it is important, notwithstanding the limited value of approximate summary measures such as total fertility rates or reproduction rates, to look closely at fertility rates related to specific age and duration groups. Such rates for 1952 and 1953 are summarised in Table XII.

Legitimate maternities at successive marriage durations are classified by individual ages of the mother in Table OO of Part II of each year up to 1951 and from 1952 in Table II, which refers to women married once only. The corresponding maternities of all married women for 1938-1945 were shown in Table IV of Appendix I on page 168 of the 1940-45 Civil Text, for 1946-1950 in Table 4 of Appendix II on page 188 of the 1946-50 Civil Text, and for 1951 in Table 3 of Appendix B on page 300 of the 1951 Text.

Annual rates corresponding to the maternities are shown in Table KK and have been obtained by relating them to the estimated years of married life exposed to risk, shown in Table JJ. Similar annual rates (subject to tabulation changes) for 1938-1945 appeared in Table V of Appendix I on page 172 of the 1940-45 Civil Text and for 1946-1950 in Table 5 of Appendix II on page 192 of the 1946-50 Civil Text. It should be noted that a maternity rate expressed per year of married life may be regarded as equivalent to the annual rate per married woman. The rates shown are maternity rates and to obtain equivalent birth rates they should be multiplied by the appropriate ratios of births to maternities.

The rates for 1953 conform generally to the pattern of earlier years. At each duration the rates decline, more or less consistently, with increasing age of mother; and, at each age of mother, after rising to a maximum in the second year of marriage (except in those under age 20 where pre-marital conceptions are relatively more numerous), they decline with lengthening duration of marriage.

The rates at durations under 9 months, conventionally attributed to pre-marital conceptions, may be seen to share with those at other durations the property of declining with age. The decline from the rate for mothers under age 20 to that of the next older group 20-24 is very steep, the latter rate being only some 40 per cent of the former, but thereafter the decline continues more gradually.

Table XII shows that the upward fluctuation in fertility in 1953 was mainly attributable to increases in the rates at durations between 3 and 10 years among younger women. Elsewhere in the table the differences between 1952 and 1953 are insignificant. (The rates at durations 2 and 3 years for women under 20 are based upon very small numbers and are subject to large chance fluctuations from year to year without any other significance).

Table XII.—Legitimate maternity rates for women married once only by age and duration in 1952 and 1953, England and Wales

Age of Married Woman	Year	Marriage Duration (completed years)										
		All Durations	0-	1-	2-	3-	4-	5-9	10-14	15-19	20-24	25 and over
All ages under 50	1952	·088	·279	·261	·220	·194	·171	·113	·049	·019	·007	·001
	1953	·090	·280	·264	·227	·208	·181	·118	·049	·019	·007	·001
Under 20	1952	·420	·472	·328	·323	·261	—	—	—	—	—	—
	1953	·432	·476	·333	·374	·462	—	—	—	—	—	—
20-24	1952	·252	·277	·283	·247	·227	·212	·191	—	—	—	—
	1953	·258	·271	·284	·254	·244	·226	·212	—	—	—	—
25-29	1952	·167	·233	·246	·212	·194	·178	·137	·113	—	—	—
	1953	·174	·236	·252	·219	·209	·186	·143	·124	—	—	—
30-34	1952	·101	·223	·238	·201	·177	·156	·107	·070	·075	—	—
	1953	·102	·229	·238	·199	·187	·166	·109	·070	·076	—	—
35-39	1952	·050	·164	·179	·148	·129	·121	·077	·043	·036	·043	—
	1953	·050	·162	·180	·151	·132	·124	·081	·042	·036	·045	—
40-44	1952	·015	·051	·067	·057	·045	·042	·027	·017	·012	·012	·012
	1953	·015	·052	·061	·052	·049	·040	·030	·017	·012	·012	·012
45-49	1952	·001	·006	·003	·004	·004	·003	·003	·002	·001	·001	·001
	1953	·001	·005	·004	·004	·002	·005	·002	·001	·001	·001	·001

Cohort Analysis.—In considering replacement, the total ultimate size of family produced by each married woman is of more interest than the rate at which she may be building her family at any particular time. Maternity rates may be calculated each year and aggregated from year to year to show the average total number of maternities experienced by married women over the whole of various durations of marriage, i.e. effectively to trace their family building as they pass through their reproductive married lives.

During their married lives, women pass not only through successive durations of marriage, but simultaneously through successive ages. Thus, for example, the maternity rates in 1946 at duration 0- at maternal age 20-24, and in 1947 at duration 1- and age 21-25 are both related to women married at about the same time and at the same ages, i.e. they belong to the same marriage cohort* and they may be aggregated to show the average number of maternities experienced by the cohort by the end of the second year of married life. Similarly, the maternity rate in 1948 at duration 2- and age 22-26 may be added to the previous total to bring it up to the end of the third year of married life, and so on. If in place of maternity rates, rates based on legitimate liveborn children are used and are added to base-line data provided by census material, estimates are obtained of the family sizes (ignoring the factor of survival) at different durations of marriage and different attained ages of the various marriage cohorts who make up the current population of married women. Such estimates are shown in Table PP of the Statistical Review, Part II. The original base for this table was derived from the results of the Sample Family Census, 1946, carried out by the Royal Commission on Population† to which have been added registration statistics to the

*The term cohort is used for convenience to refer to women married during the same interval of time.

†Papers of the Royal Commission on Population, Volume VI—"The Trend and Pattern of Fertility in Great Britain. A Report on the Family Census of 1946"; D. V. Glass and E. Grebenik, H.M.S.O. 1954, price £3 10s. net.

end of 1953. In order to focus attention on the marriage cohorts, the table is presented in a form which relates the family building to the women married in particular age-groups and particular calendar years. It should be emphasised that these families are not, except for the older cohorts, complete; additions are still being made to those of the earliest cohorts and the table merely shows the average size attained by the end of 1953.

The following statement provides a comparison of average family sizes at corresponding durations, derived partly from the above mentioned "Report on the Family Census of 1946"* and partly from Table PP.

Average number of liveborn children									
Year of Marriage	Marriage Duration (completed years)								
	5 years					9 years			
	1930	1940	1943	1947	1948	1930	1940	1943	1944
Age at marriage:—									
under 20	1·69	1·27	1·43	1·65	1·70	2·31	2·00	2·04	2·05
20–24	1·29	1·04	1·22	1·40	1·35	1·79	1·61	1·72	1·74
25–29	0·97	0·92	1·13	1·31	1·25	1·41	1·39	1·52	1·56
30–34	0·88	0·86	0·96	1·09	1·07	1·09	1·15	1·21	1·24
35–39	0·62	0·53	0·59	0·69	0·67	0·67	0·61	0·66	0·69
40–44	0·25	0·23	0·22	0·29	0·26	0·27	0·24	0·22	0·23

From this selection of the available figures it can be seen that the cohort of women married in 1930 at ages under 20 had an average of 1·69 live births after 5 years of married life and 2·31 after 9 years. Those married at the same ages at the beginning of the war and subject to considerable war-time separation had only 1·27 live births after 5 years, but after 9 years they had an average family size of 2·00, having made up some part of the gap between the two cohorts represented by births postponed by the war. For the cohorts married at ages 20-29, this later recovery is even more striking.

The 1943 and 1944 cohorts in their later years of marriage had outstripped the family sizes of earlier cohorts for ages at marriage above 25 years, but for earlier marriage ages their attained family sizes, though higher than those of the 1940 cohort, were smaller than those of the 1930 cohort, whose corresponding years of marriage entirely preceded the war and were free from the factors of separation and other war conditions which affected the later cohorts.

The latest cohorts shown, those married in 1948, have average family sizes in excess of those produced after 5 years by women married in 1930. The ultimate family size of these post-war cohorts will not be known for several years yet, but it is probable that after 5 years duration the 1948 cohort, freed from war disturbances and subject to the tendency to complete family building in the early years of married life, has completed a greater proportion of its total family building than the war-time cohorts, and that an increase in family size as compared with earlier cohorts will not be maintained at later durations. It is also noteworthy that except for the very youngest marriage ages the family sizes so far attained by the 1948 cohorts are slightly smaller than those of the 1947 cohorts.

* These are unpublished figures relating to England and Wales; corresponding figures published in the 1952 Text related to Great Britain and had not been adjusted to the durational basis of Table PP.

First Maternities (Legitimate)

Of the 637,942 legitimate maternities to women married once only, in 1953 251,487 or 39·4 per cent were first maternities. The records for previous years include some women married more than once and are not strictly comparable, but on the basis of the experience of all women the proportion was 42·9 per cent in 1938. After the decline in the war years, the proportion rose to a peak of 45·4 per cent in 1947 when birth incidence was at a maximum and thereafter declined.

The incidence of first-born children is naturally at a maximum for recent marriages and thus the proportion of first maternities among all legitimate maternities will be raised immediately following a rise in marriage incidence. The proportion of first maternities will be highest also at the youngest ages of mothers, again because their marriages will be comparatively recent. These effects are illustrated by Table XIII.

Table XIII.—First maternities to existing marriages per 1,000 total legitimate maternities at each age, 1938 to 1953, England and Wales*

Age of Mother	1938	Average 1939-49	1946	1947	1948	1949	1950	1951	1952	1953
All Ages	429	433	431	454	426	410	393	388	395	394
Under 20	890	900	913	912	898	885	868	861	870	873
20-	644	683	701	710	666	635	613	609	618	616
25-	469	450	464	470	414	382	362	358	364	362
30-	296	285	287	293	259	243	234	228	215	210
35-	166	182	194	202	186	181	170	163	147	141
40 and over ..	95	119	130	143	142	140	136	137	109	101

* From 1952 onwards the comparisons relate to women married *once only*.

The rise at the end of the war and the decline after 1947 in the proportion of first maternities amongst legitimate maternities of mothers of all ages, may also be seen in the first line of the table. A certain degree of stability seems to have been reached in recent years there being little movement in the proportion since 1950. In the separate age-groups, also, a similar pattern is seen in general, with a peak in 1947 above the 1938 level and a subsequent decline, apparently exhausted, to below the 1938 level. The proportion of first maternities declines steeply with advancing age in all years.

There have been changes in marriage and family building habits which will be reflected in the proportion of first maternities. The lowering of the average age at marriage, which should lower the proportion at all except the youngest ages, may in fact be the major cause of the proportions in 1950-53 being generally lower than in 1938. The decreases, both in childlessness and in the proportion of families of the larger sizes which appear to have been taking place, will tend to offset to some extent the decline in the proportions of first maternities arising from the lowering of age at marriage. Changes in family spacing may also be reflected in movements in the proportions but it is not at present practicable to isolate such changes.

Family building tends to be concentrated in the few years immediately after marriage and the concentration will necessarily be accentuated when consideration is confined to first births or maternities. The extent of this concentration may be seen from Table XIV showing the numbers and distribution of first legitimate maternities by duration of marriage.

Table XIV.—Numbers and Distribution by Duration of Marriage of First Maternities by existing husbands to married women of all ages, 1938 to 1953, England and Wales

Calendar Year	Duration of Marriage*												All Durations
	0-8½ mths.	8½-11½ mths.	1- year	2- years	3- years	4- years	5- years	6- years	7- years	8- years	9- years	10+ years	
Numbers (hundreds)													
1938 ..	63,2	32,0	70,6	35,4	21,7	13,5	8,0	5,3	3,6	2,7	1,8	4,1	261,9
1939-49†	48,3	37,3	80,7	40,1	25,1	17,7	13,0	9,6	6,4	4,2	2,9	6,5	291,8
1946 ..	43,0	44,6	81,4	34,2	26,2	27,9	24,9	22,2	9,8	6,3	4,7	9,7	334,8
1947 ..	58,9	53,2	106,4	44,0	24,4	23,0	22,2	17,7	14,0	6,2	4,2	9,6	383,6
1948 ..	61,2	49,3	90,6	40,4	20,6	11,4	9,8	9,2	7,6	6,1	2,9	6,9	315,9
1949 ..	58,1	39,7	88,9	37,6	21,4	11,4	6,4	5,8	5,1	3,9	3,5	5,7	287,4
1950 ..	53,5	37,5	77,3	36,8	19,8	12,2	6,7	3,9	3,4	3,3	2,6	5,6	262,6
1951 ..	49,9	35,4	73,6	35,0	21,6	12,7	7,9	4,4	2,4	2,3	2,2	5,3	252,7
1952‡	50,1	34,3	66,9	34,5	21,5	13,9	8,4	5,5	3,0	1,8	1,7	5,7	247,4
1953‡	49,6	33,3	66,6	36,6	22,7	14,7	9,5	5,9	3,8	2,1	1,4	5,3	251,5
Distribution per 1,000 total													
1938 ..	241	122	269	135	83	52	31	20	14	10	7	16	1,000
1939-49	165	128	277	137	86	61	45	33	22	14	10	22	1,000
1950 ..	204	143	294	140	75	46	26	15	13	13	10	21	1,000
1951 ..	198	140	291	139	85	50	31	17	10	9	9	21	1,000
1952 ..	203	139	270	140	87	56	34	22	12	7	7	23	1,000
1953 ..	198	132	265	146	90	58	38	23	15	8	6	21	1,000

* Durations 1- year, 2- years, etc., are more correctly 11½ months-1 year 11½ months, 1 year 11½ months-2 years 11½ months, etc., prior to 1952; in 1952 and 1953 the earlier durations are 0-, 9- months.

† Annual average.

‡ First maternities to women married *once only*; not strictly comparable with earlier figures owing to the duration shift of ½ month.

From the lower part of the table it may be seen that about three-quarters of first births are in the first three years of marriage; 76.7 per cent in 1938, 77.0 per cent in 1951, 75.2 per cent in 1952 and 74.1 per cent in 1953. Although these four proportions are very similar in magnitude, an examination of their constituent parts shows a difference, namely, the decline since 1938 at durations under 8½ months (9 months in 1952 and 1953) conventionally associated with pre-marital conceptions. In 1938 these accounted for nearly a quarter of all first legitimate maternities and since 1950 the proportion has been about one-fifth. Restricting consideration to later durations produces the following distributions. (To facilitate comparison between 1952 and the earlier years in the series an adjustment has been made to the 1951 distribution to make an estimated allowance for the ½ month tabulation shift).

Period	Duration of Marriage											
	All Durations over 8½ months (9 months in 1952 and 1953)	8½-11½ months (9-12 months in 1952 and 1953)	Years									
			1-	2-	3-	4-	5-	6-	7-	8-	9-	10+
1938 ..	1,000	161	355	178	109	68	40	27	18	14	9	21
1939-49 ..	1,000	153	331	165	103	73	53	40	26	17	12	27
1950 ..	1,000	179	370	176	95	58	32	19	16	16	12	27
1951 ..	1,000	174	363	173	106	63	39	22	12	11	11	26
1951 Adjusted	1,000	179	360	171	106	63	39	21	12	12	11	26
1952*	1,000	174	339	175	109	70	43	28	15	9	9	29
1953*	1,000	165	330	181	113	73	47	29	19	10	7	26

* Women married *once only*.

The underlying tendency in the war and immediate post-war years to postpone births is clearly seen by the shift from shorter to longer durations in the distribution for 1939-49, as compared with the periods before and after. In 1952 and 1953 there is rather less concentration in the first two years of marriage than in 1950 and 1951.

Birth Occurrences and Registration Time Lag

The statutory period allowed for registration of either a live birth or a still-birth is 42 days and as a consequence there has generally been an appreciable time lag between the occurrence of a birth and its subsequent registration. In the past the time lag has been found to decrease markedly after the introduction of an incentive to register earlier, for example, by the dependence of the issue of food ration books and Family Allowances upon birth registration. Conversely, registration has become more tardy when such incentives have been removed or have become less compelling. In 1953 the average time lag between occurrence of a birth and registration was about ten days.

The importance of time lags arises from their influence on the difference between the number of births registered in a period and the number occurring in that period. Occurrences are usually the more appropriate statistics for fertility measurement but registrations are available sooner. The difference between the two is influenced by the time lag in two ways. A difference will occur, even though the time lag be constant, if birth incidence is changing; and also, even though birth incidence be constant, if the time lag is changing. In practice both factors operate. The combined effect of these factors may be measured by the ratio of occurrences to registrations, and has been very small except in the unsettled conditions of 1940-41 as the following figures show :—

Ratio of birth occurrences to registrations

1939	1940	1941	1942	1943	1944	1945	
·992	·972	·986	·996	1·002	1·009	·992	
1946	1947	1948	1949	1950	1951	1952	1953
1·001	·993	·998	·999	1·008	·997	1·001	1·004

Seasonal Incidence of Births

The pre-war incidence of legitimate live births followed a regular annual cycle with a minimum in the fourth quarter (corresponding to conceptions in the first quarter) and a maximum in the second quarter (corresponding to conceptions in the previous third quarter). Table XV shows the quarterly distribution in 1939, a typical pre-war year. The war disturbances, especially the sharp fluctuations in the birth rate, distorted this pattern, but the table shows that in 1951 and 1952 a return had been made to the seasonal periodicity of pre-war years. This is even more clearly the case in 1953.

Table XV.—Ratio of Quarterly Births to Average Quarterly Births taken as 100: 1939, 1946 to 1953, England and Wales

Period	Year								
	1939	1946	1947	1948	1949	1950	1951	1952	1953
Legitimate Live Births									
1st Quarter	99	86	109	105	102	104	103	102	100
2nd " 	106	99	106	103	105	104	107	104	106
3rd " 	101	105	97	99	100	98	99	100	101
4th " 	94	110	88	93	93	94	91	94	93
Year 	400	400	400	400	400	400	400	400	400
Illegitimate Live Births									
1st Quarter	105	107	110	107	105	106	104	103	102
2nd " 	107	110	108	109	106	107	109	107	108
3rd " 	100	95	98	96	99	96	96	100	98
4th " 	88	88	84	88	90	91	91	90	92
Year 	400	400	400	400	400	400	400	400	400
Legitimate Stillbirths									
1st Quarter	104	91	115	109	104	104	107	107	102
2nd " 	104	99	105	102	105	104	103	102	106
3rd " 	98	101	93	96	97	97	95	94	96
4th " 	94	109	87	93	94	95	95	97	96
Year 	400	400	400	400	400	400	400	400	400

The incidence of illegitimate births has a minimum and maximum in the fourth and second quarters, like legitimate births, but differs in that the periodicity is associated with a larger swing, and in that the births of the first quarter (corresponding to the previous second quarter conceptions) markedly exceed those of the third quarter (corresponding to the previous fourth quarter conceptions). Here also the 1953 distribution resembles that of pre-war years.

Variations in the incidence of legitimate stillbirths are due to the combined effect of two factors, the seasonal incidence of all legitimate births, live and still, and seasonal variations in stillbirth rates, the former having the greater influence. Thus there is a strong tendency for the distribution to follow that of live births, but the effect of the generally higher stillbirth risk in winter months can be seen in a shift from the third to the first quarter as compared with live births.

Since 1938 tabulations of births by month of occurrence have been shown in Table YY of Part II up to 1951 and in 1952 and 1953 in Table TT, and permit a closer study of the seasonal incidence of births. The length of calendar months varies, and therefore to allow for this Table XVI shows daily averages.

Table XVI.—Relative Birth Incidence in Calendar Months, 1939, 1951 to 1953, England and Wales

Month of Occurrence	Ratio of Monthly Daily Average to that of the Calendar Year taken as 1,000											
	Legitimate Live Births				Illegitimate Live Births				Legitimate Stillbirths			
	1939	1951	1952	1953	1939	1951	1952	1953	1939	1951	1952	1953
January	980	1,005	990	968	1,076	982	983	968	1,043	1,036	1,055	1,031
February	995	1,041	1,035	1,020	1,041	1,071	1,026	1,042	1,045	1,115	1,101	1,015
March	1,041	1,076	1,062	1,059	1,080	1,098	1,082	1,083	1,078	1,119	1,069	1,063
April	1,073	1,076	1,062	1,050	1,046	1,111	1,101	1,094	1,068	1,059	1,078	1,101
May	1,078	1,084	1,051	1,075	1,138	1,117	1,073	1,104	1,060	1,058	1,011	1,052
June	1,043	1,057	1,006	1,062	1,044	1,061	1,063	1,047	1,002	977	984	1,037
July	1,025	1,016	1,000	1,026	1,038	1,011	1,034	1,008	984	968	928	950
August	985	968	974	979	960	919	958	943	972	935	941	954
September	1,004	973	1,006	1,007	969	938	986	969	963	908	951	938
October	939	892	954	934	859	869	879	880	938	931	989	913
November	914	882	923	900	853	870	898	901	932	944	963	943
December	927	936	938	924	898	957	921	966	917	954	937	1,006
Year	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

For legitimate live births, the table shows that in 1953 the daily average rose sharply up to March and remained high until June, the peak being reached in May. Thereafter a steep decline occurred interrupted only by a minor peak in September (corresponding to conceptions at Christmas when there is a concentration of new marriages). After reaching a minimum in November (below the annual daily average by 10 per cent in 1953) the rising phase commenced. This is the normal pattern.

The course of illegitimate births exhibits the same features as that for legitimate births, including the minor upward fluctuation in September, but the amplitude of the cycle is greater.

A comparison of the ratio shown in Table XVI for legitimate stillbirths and live births shows the same general similarity as was indicated by the quarterly table, the higher stillbirth rates of the winter months exercising a perceptible influence.

Sex Ratio at Birth

In 1953 there were 1,059 male live births per 1,000 female live births. This ratio was 5 per thousand more than in the previous year.

In the present century there has been an upward but irregular trend with three distinct periods when the sex ratio was temporarily lifted above the long-term trend. The first occasion was in the years 1919 to 1922, the second between 1934 and 1937 (approximately) and the third from 1942 to 1944. It has been suggested that the first and third of these increases were in some way attributable to war conditions and the second to the abnormal economic conditions of the 1930's, but these suggestions have never been substantiated to the extent of demonstrating causation. It might be conjectured that these three periods were alike in containing an undue proportion of first births to young mothers, in the marriage booms after the First World War, after the recovery from the economic depression and—with a delayed sequence in births perhaps attributable to war conditions—at the onset of the Second World War, but these suggestions are, at best, plausible. Attempts to produce convincing evidence have so far failed.

The generally rising trend in the sex ratio in the present century can be attributed to the continuous reduction of foetal mortality. Biologically, sex is determined, not at birth, but at conception, and losses from abortion and stillbirths intervene between conception and live birth. Abortion and stillbirth rates are known to be higher for males.

Table XVII.—Male Births per 1,000 Female Births distinguishing Legitimacy and whether Live or Still, 1928 to 1953, England and Wales

Period	Legitimate Births			Illegitimate Births		
	Live	Still	Live and Still	Live	Still	Live and Still
1928–30 ..	1,044	1,231	1,051	1,037	1,280	1,049
1931–35 ..	1,051	1,207	1,057	1,044	1,153	1,049
1936–40 ..	1,054	1,183	1,059	1,050	1,117	1,054
1941–45 ..	1,061	1,158	1,064	1,074	1,173	1,078
1946–50 ..	1,061	1,169	1,063	1,056	1,238	1,061
1951 ..	1,060	1,179	1,062	1,060	1,277	1,066
1952 ..	1,054	1,149	1,056	1,066	1,194	1,070
1953 ..	1,059	1,118	1,060	1,062	1,273	1,068

From Table XVII, which shows masculinity for live and stillbirths in both legitimate and illegitimate sections, it may be seen that the proportion of boys is consistently higher amongst stillbirths than live births, and this implies that stillbirth losses are greater for boys than girls. It will also be noticed that as the stillbirth rate has been reduced the sex mortality differential has also been reduced so that the masculinity of legitimate stillbirths has generally fallen since 1928-30.

For legitimate live births 1953 represented a recovery from the sharp downward fluctuation of 1952 from the high level of masculinity reached as a result of a long-term upward trend.

Multiple Births

During 1953 there were 700,053 births (live and still) from 691,180 maternities, the excess of 8,873 being the additional children born in multiple births. Tables CC and DD of 1953 Part II give details of the 8,787 maternities with multiple births and show that 8,703 produced twins, 83 triplets and 1 quintuplets, a total of 16,663 live and 997 stillborn children.

The frequencies of multiple maternities and births in the current year compared with the whole period since 1938 when the data was first tabulated are summarised as follows :—

	All Multiple		Twins		Triplets	
	1938–1952	1953	1938–1952	1953	1938–1952	1953
Multiple Maternities* per 1,000:—						
<i>Total Maternities:</i>	12·38	12·71	12·27	12·59	0·107	0·120
Multiple births per 1,000 total births ..	24·56	25·23	24·23	24·86	0·317	0·356
Multiple live births per 1,000 liveborn children	23·73	24·35	23·42	24·01	0·295	0·338
Multiple stillbirths per 1,000 stillborn children	53·40	63·58	52·29	62·11	1·079	1·148

* A maternity is treated as multiple whether or not the children involved are live or stillborn.

The probabilities of a multiple event occurring will be the reciprocals of the rates shown above, so that taking mothers of all ages together the chance of a multiple maternity was 1 in 81 in 1938-1952 and 1 in 79 in 1953. Twenty-five out

of every 1,000 children born in 1938-1952 and in 1953 were twins, triplets or quadruplets, the proportion being about twice as great amongst stillborn children as amongst liveborn.

Birth Rates in Different Parts of the Country

The birth rates of individual administrative areas in 1953 are given in Tables 12 and E. They are summarised in Table XVIII, which shows, for each standard region, conurbation and aggregate, live birth rates and the ratio of the local to the national rate. In Table XIX these rates are ranked in order of size.

Table XVIII.—Birth Rates in Standard Regions, Conurbations and Aggregates Summary, 1953

(All the ratios were calculated before rounding off the rates)

Area	All Live Births				Ratio of proportion married among Females 15-44 to national proportion as at 1951 Census	Illegitimate Live Births	
	Crude Rate per 1,000 Home population	Adjusted Birth Rate	Ratio of Local to National Rate			Crude Rate per 1,000 Home Population	Ratio of Local to National Rate
			Crude	Adjusted			
ENGLAND AND WALES ..	15.5	15.5	1.00	1.00	1.00	0.74	1.00
Regions and Conurbations :							
Northern	17.5	17.9	1.13	1.15	0.99	0.64	0.87
<i>Tyneside Conurbation</i> ..	17.6	16.8	1.14	1.08	0.98	0.64	0.87
<i>Remainder of Northern</i> ..	17.5	18.2	1.13	1.17	1.00	0.65	0.87
East and West Ridings ..	15.8	15.8	1.02	1.02	1.03	0.72	0.89
<i>West Yorkshire Conurbation</i>	15.2	15.4	0.98	0.99	1.02	0.82	1.11
<i>Remainder of East and West Ridings</i>	16.2	16.0	1.04	1.03	1.04	0.66	0.98
North Western	16.0	16.0	1.03	1.03	0.99	0.75	1.01
<i>South East Lancashire Conurbation</i>	15.7	15.7	1.01	1.01	1.01	0.80	1.08
<i>Merseyside Conurbation</i> ..	19.2	18.2	1.24	1.17	0.92	0.94	1.28
<i>Remainder of North Western</i>	14.8	15.4	0.95	0.99	1.00	0.60	0.81
North Midland	16.1	16.4	1.04	1.06	1.05	0.76	1.04
Midland	16.2	16.1	1.05	1.04	1.03	0.72	0.98
<i>West Midlands Conurbation</i>	16.3	15.3	1.05	0.99	1.02	0.74	1.00
<i>Remainder of Midland</i> ..	16.2	16.5	1.04	1.06	1.03	0.71	0.96
Eastern	15.7	16.3	1.01	1.05	1.02	0.77	1.04
London and South Eastern ..	14.1	13.4	0.91	0.86	0.97	0.76	1.03
<i>Greater London</i>	14.1	13.2	0.91	0.85	0.97	0.77	1.04
<i>Remainder of South Eastern</i>	14.0	14.8	0.90	0.95	0.97	0.73	0.99
Southern	15.3	16.1	0.99	1.04	1.00	0.84	1.13
South Western	15.1	16.0	0.97	1.03	1.00	0.72	0.97
Wales (including Monmouthshire)	16.0	16.5	1.03	1.06	0.99	0.64	0.86
<i>Wales I (South East)</i> ..	16.3	16.7	1.05	1.07	1.01	0.59	0.80
<i>Wales II (Remainder)</i> ..	15.2	16.3	0.98	1.05	0.94	0.76	1.03
Aggregates Summary (by type of area):							
Conurbations	15.3	14.6	0.99	0.94	0.98	0.78	1.06
Areas outside Conurbations:							
Urban areas with populations of 100,000 and over	15.8	15.8	1.02	1.02	1.01	0.82	1.12
Urban areas with populations of 50,000 and under 100,000	15.5	15.8	1.00	1.02	1.01	0.78	1.06
Urban areas with populations under 50,000 ..	15.6	16.1	1.00	1.03	1.01	0.66	0.90
Rural Districts	15.6	16.9	1.01	1.09	1.01	0.66	0.89

**Table XIX.—Ranking Comparison of Birth Rates in Regions, Conurbations and
Aggregates Summary, 1953***

(The rankings were assessed before rounding off the rates)

Area	All Live Births	
	Crude	Adjusted
Conurbations and Remainders of Regions		
Tyneside Conurbation	2	3
Remainder of Northern Region	3	2
West Yorkshire Conurbation	12½	13
Remainder of East and West Ridings	6½	11
South East Lancashire Conurbation	9½	12
Merseyside Conurbation	1	1
Remainder of North Western Region	15	14
North Midland Region	8	6
West Midlands Conurbation	5	15
Remainder of Midland Region	6½	5
Eastern Region	9½	8
Greater London	16	17
Remainder of South Eastern Region	17	16
Southern Region	11	9
South Western Region	14	10
Wales I (South East)	4	4
Wales II (Remainder)	12½	7

Aggregates Summary (by type of area)

Conurbations	5	5
Areas outside the Conurbations:		
Urban areas with populations of 100,000 and over	1	3
Urban areas with populations of 50,000 and under 100,000	4	4
Urban areas with populations under 50,000	3	2
Rural Districts	2	1

* In accordance with the usual convention, ties are given the mean of the ranks in question; thus where in the crude column two areas have equal rates which would rank them both sixth, they are given the rank of 6½ (the mean of 6 and 7) and the next area is ranked 8.

Comparisons of the crude rates between different areas are not strictly valid, since they take no account of the varying composition of the population by sex and age of the different areas. To overcome this difficulty in the case of all live births an approximate adjustment may be made by multiplying the rates by the area comparability factors (A.C.Fs.) introduced in 1949 and described in the Civil Text volume for 1946-50. They are shown in Table 12 of Part I and Table E of Part II. The nature of this correction has to be kept in mind in interpreting the

adjusted rates. The A.C.F. simply allows for the varying proportion of women of childbearing age in the aggregate local population, but not for any other factors, e.g. the proportion of these women who are married. Adjustment for the latter is required if the object is to compare the fertility levels of married women in different areas; on the other hand if the object is to compare the birth increment to local populations, the proportion married is separately examined (*inter alia*) as a possible source of birth rate variation *after* such variation (adjusted for age and sex) has been ascertained. For this purpose Table XVIII includes a column showing the ratio of the proportion married among females aged 15-44 to the national proportion at the 1951 Census.

All Live Births.—The Merseyside Conurbation has the highest rates among the regions, both crude and adjusted, while Greater London and the Remainder of the South Eastern Region have the lowest. But the relatively low crude rate of Wales II (Remainder) and the relatively high rate of the West Midlands Conurbation are both due to their peculiar population structure by sex and age; adjustment raises the ranking of the former from $12\frac{1}{2}$ to 7 and lowers that of the latter from 5 to 15. Similarly the ranking for the Remainder of East and West Riding is reduced from $6\frac{1}{2}$ to 11 and for the South East Lancashire Conurbation from $9\frac{1}{2}$ to 12 after adjustment, and that for the South West Region is raised from 14 to 10. No other large differences are effected by the adjustment. It will be seen from Table XVIII that neither the high (adjusted) birth rates of the Merseyside Conurbation, the Northern Region and Wales, nor the low birth rates in Greater London can be accounted for by differential marriage incidence since the proportion of the female population aged 15-44 who are married is not sufficiently different from that of England and Wales as a whole. In many other areas high marriage proportions do account for the excess of the birth rate above the national figure.

In the aggregates of areas by type the crude rate is highest for the urban areas (outside conurbations) with a population of 100,000 or more, and lowest for the conurbations; but the adjusted rates are roughly in reverse order of urbanisation, the rural districts having the highest and the conurbations the lowest rate. Differences in married proportions do not account for this gradient.

Illegitimate Live Births.—Among the regions Wales I (South East) still has the lowest illegitimacy rate. High rates were experienced in the Merseyside, West Yorkshire, and South East Lancashire conurbations and in the Southern Region. In Merseyside the high rate is associated with a low proportion married in the total population.

In the aggregates of areas by type illegitimacy was higher in the conurbations and large towns and lower in the small towns and rural districts.

Stillbirths

The registration of stillbirths in England and Wales began on 1st July, 1927, when the Births and Deaths Registration Act, 1926, came into operation. The Statistical Reviews, Part II, show numbers of stillbirths in England and Wales as a whole by quarters (Table D) and annually by sex and legitimacy (Table B). Table E1 gives annual totals of stillbirths for the standard regions, conurbations, aggregates of areas by type, metropolitan and county boroughs and administrative counties, and Table E gives the same information for all county districts.

Under the Population (Statistics) Act, 1938, additional information has been collected at the registration of births, including stillbirths, and detailed tabulations of stillbirths by legitimacy and mother's age appear in the Fertility Analyses of the Annual Reviews, Part II.

The secular trend of stillbirth rates and their geographical variation are both discussed in that part of this Text which deals with mortality. The broad picture is that the stillbirth rate has remained fairly stable since 1949, the figures for the individual years 1949-53 being 22·7, 22·6, 23·0, 22·7, 22·4 (per thousand total live and stillbirths). The effects of multiple maternities, age of mother and birth order were amply discussed in the Civil Text for 1946-50, pages 141-144, where it was shown that the risk is much higher in multiple than in single births (especially at the younger ages of mother where the single birth risks are lower); is higher in male than in female births; increases with age of mother except at the youngest ages; and independently of age it varies with parity being highest at first births, and lower at the second than at any other higher parity birth. Treatment of such aspects as these requires the provision of data for several years in order that the numbers should be sufficiently large to justify analysis. The statistics for 1951 to 1953 do not increase the available data to an extent justifying a fresh analysis and a few years must elapse before these topics can be profitably discussed again.

MARRIAGES

During 1953 there were 344,998 marriages registered in England and Wales. This compares with 349,308 marriages in 1952, and 360,624 in 1951.

In relation to the total population, of all ages and marital conditions, the experience of 1953 represents a rate of 15·6 persons married per 1,000 population compared with 15·8 in 1952, 18·1 in 1939-49, 17·6 in 1938 and 17·5 in 1937. The numbers of marriages and rates per 1,000 population for calendar years are given in serial form in Tables B and C of Part II and in Table D for calendar quarters. The figures for each year from 1936 to 1953 have been extracted from these tables and are shown in Table XX, from which it may be seen that in the post-war period, a peak was reached in 1947 with a rate of 18·6 persons married per 1,000 population. Thereafter, except for slight and shortlived resistance to the downward trend in 1951, a continuous decline ensued.

Table XX.—Marriages and Marriage Rates, 1936 to 1953, England and Wales

	Number of Marriages (in thousands)					Persons Married per 1,000 Population (in the form of annual rates)				
	Year	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
1936	355	50	101	115	89	17·4	9·8	19·8	22·5	17·3
1937*	359	71	80	121	87	17·5	14·0	15·7	23·5	16·8
1938	362	52	102	117	91	17·6	10·3	19·9	22·4	17·5
1939-45*†	381	75	99	110	97	18·1	14·6	18·8	20·7	18·3
1946	386	78	101	110	96	18·0	14·8	19·0	20·4	17·9
1947	401	75	109	119	97	18·6	14·2	20·3	22·0	18·0
1948*	397	95	93	123	85	18·2	17·6	17·2	22·5	15·6
1949	375	82	96	114	83	17·1	15·1	17·5	20·7	15·1
1950	358	87	81	115	76	16·3	16·0	14·7	20·7	13·7
1951*	361	110	66	111	73	16·4	20·2	12·1	20·1	13·2
1952	349	107	69	103	70	15·8	19·4	12·7	18·6	12·6
1953	345	94	77	105	69	15·6	17·1	14·0	18·9	12·3

* In the years so marked, Easter fell in the first quarter. During the years 1939 to 1945, Easter fell in the first quarter in 1940 only.

† Annual averages.

The high incidence of marriage extending over a fairly long period embracing the war years has tended to deplete the non-married component of the population. It is to the latter—the population available for marriage—that marriages

should be related, and in Table XXI a comparison is made between marriage rates based on the total population and those based on the non-married population aged 15 and over of all ages extracted from Table C of Part II.

Table XXI.—Marriage Rates per 1,000 Population of all ages and per 1,000 Non-married Population aged 15 and over by sex, 1938 to 1953, England and Wales

Period	Per 1,000 Population		Per 1,000 Non-married Population aged 15 and over			
	Rate	Ratio to 1938 rate taken as 100	Males		Females	
			Rate	Ratio to 1938 rate taken as 100	Rate	Ratio to 1938 rate taken as 100
1938	17·6	100	61·2	100	47·8	100
1939-49*	18·1	103	68·8	112	53·0	111
1950	16·3	93	66·1	108	51·7	108
1951	16·4	93	69·2	113	52·1	109
1952	15·8	90	67·6	110	50·9	106
1953	15·6	89	67·2	110	50·6	106

* Annual averages.

The marriage rate in 1953 per 1,000 population of all ages was 1 per cent below that of 1952 and 11 per cent below that of 1938. In contrast, the rate in 1953 when related to the marriageable population was almost the same as that of 1952 and for males was still 10 per cent above that of 1938; for females it was also the same as that of 1952 and still 6 per cent above that of 1938. Some decline from the high rates which had been maintained for so prolonged a period was expected. This decline in total marriage incidence, when properly related to the non-married population, appears to have begun in 1952 but as yet has been slow and relatively small in extent; and as will be seen later does not yet apply to the more important element of first marriages at young ages.

Marriage Analyses by Sex, Age, etc.

The marriage rates so far considered have taken no account of the ages at which the marriages took place nor of the prior marital condition of those who were married. Estimates of the population by sex, age and marital condition have been made annually and the marriages by single years of age for each sex and condition are given in Table G of successive Parts II. Marriage rates for each sex and age, distinguishing first marriages from remarriages, are shown in Table XXII.

Table XXII.—Annual Marriage Rates per 1,000 Bachelors, Widowers and Divorced Men, Spinsters, Widows and Divorced Women at each of several age periods, 1931, 1938 to 1953, England and Wales

Year	Annual marriage rates per 1,000 in each age-group						Marriage rate per 1,000 population over 15 in each class	Ratio to corresponding rate for 1938 taken as 1,000	Marriage rate which would have resulted had the 1938 age rates been in operation	Ratio of actual marriage rate (col. 8) to rate in column (10) taken as 1,000
	15–	20–	25–	35–	45–	55 and over				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
BACHELORS										
1931	3·2	72·6	141·3	49·8	16·3	5·5	56·0	864	65·0	862
1938	3·2	87·0	160·6	57·0	18·5	4·8	64·8	1,000	64·8	1,000
1939–49	6·5	112·3	160·0	62·2	21·0	5·1	71·4	1,102	63·1	1,132
1950	5·6	113·8	148·2	51·6	19·5	4·9	67·6	1,043	62·7	1,078
1951	6·2	125·7	152·1	52·3	19·7	5·3	71·4	1,102	62·3	1,146
1952	5·9	124·3	149·5	49·9	19·0	5·0	69·5	1,073	61·7	1,126
1953	6·2	130·3	146·0	47·9	17·5	5·1	69·5	1,073	61·0	1,139
WIDOWERS AND DIVORCED MEN										
1931	—	131·7	185·9	133·5	67·3	15·0	35·9	942	40·6	884
1938	—	153·6	219·8	152·6	79·1	15·9	38·1	1,000	38·1	1,000
1939–49	—	187·9	341·5	207·6	105·0	17·6	49·5	1,299	37·8	1,310
1950	—	431·0	415·7	242·5	118·6	18·1	58·2	1,528	39·2	1,485
1951	—	320·0	385·7	231·8	119·7	19·3	57·4	1,507	39·2	1,464
1952	—	153·0	369·2	226·3	121·9	19·6	57·4	1,507	39·6	1,449
1953	—	142·5	335·2	204·4	115·2	19·8	55·0	1,444	40·2	1,368
SPINSTERS										
1931	17·1	106·8	96·6	21·3	7·8	2·2	51·6	840	67·2	768
1938	22·6	147·9	117·9	22·0	8·6	2·0	61·4	1,000	61·4	1,000
1939–49	36·7	191·0	118·7	29·0	10·2	2·0	69·5	1,132	56·3	1,234
1950	39·3	208·9	123·7	29·2	10·3	2·1	69·4	1,130	52·1	1,332
1951	41·3	219·6	125·3	30·3	10·4	2·2	71·5	1,164	51·5	1,388
1952	40·6	221·2	123·0	29·3	10·5	2·1	70·1	1,142	50·6	1,385
1953	42·4	231·0	119·8	28·4	10·2	2·1	70·7	1,151	49·8	1,420
WIDOWS AND DIVORCED WOMEN										
1931	—	121·9	107·0	36·5	14·1	2·2	9·8	961	11·9	824
1938	—	197·1	131·2	50·1	14·7	2·5	10·2	1,000	10·2	1,000
1939–49	—	277·6	199·5	70·6	21·3	2·7	15·3	1,500	10·7	1,430
1950	—	336·8	229·3	83·6	27·2	2·9	18·1	1,775	11·1	1,631
1951	—	328·5	222·2	86·4	27·5	3·0	16·9	1,657	10·3	1,641
1952	—	441·3	236·3	87·3	29·9	3·0	17·0	1,667	9·9	1,717
1953	—	409·3	231·7	84·3	29·5	3·0	16·0	1,569	9·6	1,667

From this table it may be seen that the changes in marriage rates (per 1,000 at all ages over 15) from 1950 to 1953, as shown in Table XXI, do not apply equally at each age and for each marital condition. Following the heavy incidence of divorce in 1947, remarriage rates at the younger ages rose considerably but have since generally declined toward a more stable level. Too much notice should not be taken of the remarriage rates at ages below 35 where the numbers at risk are small and sharp fluctuations are liable to occur. A more reliable guide here is provided by the rate for all ages over 15 (column (8) of the table).

The persistently high marriage incidence of recent years has implied a continuing increase in the proportion married. As the increases in marriages were concentrated at the lower ages a further lowering of the average age at first marriage must accompany the depletion of the non-married, for the age structure of this component of the population must become more youthful as older

members pass into the married population. This can be seen more clearly from Table XXIII. In fact the mean age at first marriage fell for bachelors (with spinsters) from a peak of 27·74 in 1947 to 27·03 in 1953 and for spinsters (with bachelors) from 24·84 in 1947 to 23·82 in 1953.

Table XXIII.—Ratio of Marriage Rates for Bachelors, Widowers and Divorced Men, Spinsters and Widows and Divorced Women, to those of 1938 taken as 100, by age, 1931, 1939 to 1953, England and Wales

15-	20-	25-	35-	45-	55 and over	All Ages*	Period	15-	20-†	25-	35-	45-	55 and over	All Ages*
BACHELORS							1931 1938 1939-49 1950 1951 1952 1953	WIDOWERS AND DIVORCED MEN						
100	83	88	87	88	115	86		—	—	85	87	85	94	88
100	100	100	100	100	100	100		—	—	100	100	100	100	100
203	129	100	109	114	106	113		—	—	155	136	133	111	131
175	131	92	91	105	102	108		—	—	189	159	150	114	149
194	144	95	92	106	110	115		—	—	175	152	151	121	146
184	143	93	88	103	104	113		—	—	168	148	154	123	145
194	150	91	84	95	106	114		—	—	153	134	146	125	137
SPINSTERS							1931 1938 1939-49 1950 1951 1952 1953	WIDOWS AND DIVORCED WOMEN						
76	72	82	97	91	110	77		—	62	82	73	96	88	82
100	100	100	100	100	100	100		—	100	100	100	100	100	100
162	129	101	132	119	100	123		—	141	152	141	145	108	143
174	141	105	133	120	105	133		—	171	175	167	185	116	163
183	148	106	138	121	110	139		—	167	169	172	187	120	164
180	150	104	133	122	105	139		—	224	180	174	203	120	172
188	156	102	129	119	105	142		—	208	177	168	201	120	167

* Age-standardised.
† Based on small numbers.

A summary of the changes in marriage rates in the various age-groups is shown in column (9) of Table XXII in the form of a comparison of the crude rate, for all ages combined, with that of 1938 and in column (11) as a similar but age-standardised comparison.

The 1953 crude first marriage rates for bachelors and spinsters were still above those of 1938, the excess being 7·3 per cent and 15·1 per cent respectively. The age-standardised comparison, however, indicates greater increases to 1951 and, between 1951 and 1953, a smaller decrease for men and an actual increase instead of a decrease for women. The age-standardised rate in 1953 for bachelors was 13·9 per cent above 1938 and for spinsters the excess was 42 per cent (i.e. more than in 1951). This greater increase in the age-standardised rates arises from a relative lack of young bachelors and spinsters in the population in recent years as compared with 1938 as a result of the depletion of their numbers by the high bachelor and spinster marriage rates of the intervening period, despite continual replenishment from the new generations attaining marriageable age. This feature is more marked for spinsters than for bachelors.

Remarriage rates of the widowed and divorced taken together are weighted means of the separate rates for widowed and divorced, the weighting depending upon the relative numbers of each class. As a consequence of the substantial increase in the incidence of divorce since the war, the remarriage rates of the divorced are exerting a much stronger influence upon the combined rate, particularly at the younger ages. Since the remarriage rates of the divorced are also several times greater than those of the widowed, this is leading to a considerable inflation of remarriage rates of the divorced and widowed when combined. This is the significance to be attached to the substantial increase in these rates since 1938; the crude comparison gives increases in 1953 of 44·4 per cent for widowers and divorced men and 56·9 per cent for widows and divorced

women; the age-standardised comparison gives increases of 36·8 per cent for widowers and divorced men and 66·7 per cent for widows and divorced women between 1938 and 1953.

Marriages of Minors

Of the total marriages registered in 1953, those of 22,430 males and 93,544 females related to minors. These figures compare with 21,447 males and 90,363 females in 1952 and 12,164 males and 59,268 females in 1938. There was a normal excess of females in 1953; they outnumbered males by 4·2 to 1 the same as in 1952, as compared with 4·1 to 1 in 1951 and 4·9 to 1 in 1938. The increase in the marriage of male minors during the war lowered the proportion over the period 1939-49 to 3·6 to 1.

The bridegroom was a minor in 6·5 per cent of all marriages in 1953, higher than the proportion of 6·1 per cent in 1952 and well above the 1938 figure of 3·4 per cent. In the period 1939-49 the proportion was 6·8 per cent. The corresponding proportions for brides were: 1953, 27·1 per cent; 1952, 25·9 per cent; 1938, 16·4 per cent; and 1939-49, 24·2 per cent. For both bridegrooms and brides the increases in the proportions between 1952 and 1953 were small but significant; they helped to produce substantial reductions in the average age of all marriages.

These proportions and also marriage rates for minors are given in Table XXIV, which shows, in columns (6) and (7), that marriage rates of minors in 1953 were 125 per cent and 101 per cent above those of 1938 for males and females respectively. These are much greater increases in marriage rates than those associated with adult ages during the same period.

Table XXIV.—Marriages of Minors, Proportion to all Marriages, Marriage Rates, and the Ratio of these Rates to that for 1938 : 1931, 1938 to 1953, England and Wales

Year	Marriages of Minors per 1,000 marriages of all ages		Marriage rates per 1,000 non-married population aged 15-20		Ratio of Marriage rates in Cols. (4) and (5) to corresponding rate in 1938 taken as 100	
	Males	Females	Males	Females	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1931	43·5	158·5	6·7	24·8	112	81
1938	33·6	163·8	6·0	30·5	100	100
1939-1949	68·1	242·1	13·9	54·2	232	178
1950	56·9	247·2	12·2	58·5	203	192
1951	62·1	256·3	13·4	60·2	223	197
1952	61·4	258·7	12·9	59·3	215	194
1953	65·0	271·1	13·5	61·3	225	201

Marriage Incidence at Reproductive Ages

In relation to population growth a special interest attaches to the effect of changes in marriage incidence upon the proportion of women of reproductive ages who are married, since this may have some influence upon the current level of fertility. The higher the proportion of a woman's reproductive life during which she is married the longer the period during which she is theoretically at risk of childbearing. In recent times, however, the growing uniformity in the size of families has indicated a general tendency, notwithstanding individual variation, for married couples to complete their family building within a

fairly narrow range of the earlier years of their married life; correspondingly the influence of marriage age upon fertility has diminished.

Marriage Rates.—It was customary before 1946 to base the main discussion of the marriage trends at the reproductive ages on all marriages, whether first or remarriage. The fact of primary interest, however, is the establishment of additional marriages, that is to say first marriages, since remarriages do no more than make good, to some extent, the marriages which are broken by death or divorce. The earlier practice of including remarriages was justified in that, at the reproductive ages, both the changes from year to year and the actual marriage rates for the whole non-married female population were negligibly different from those for spinsters alone.

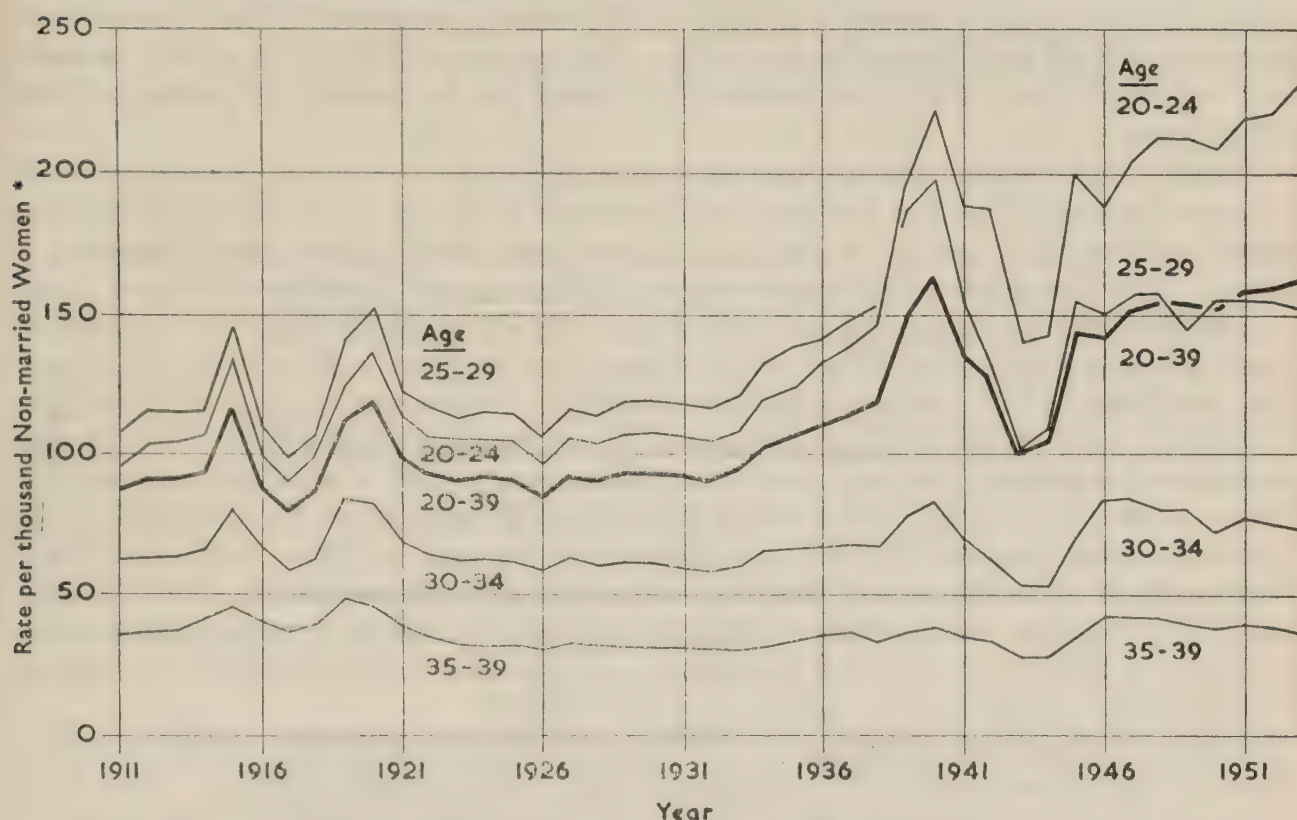
The rising incidence of divorce during the war and the abnormally high incidence in post-war years has increased the distortion imparted by the inclusion of remarriages, to a greater extent than can be tolerated. In Table XXV are set out All Marriage rates for 1911, 1931 and 1938 and First Marriage rates for these years and single years thereafter to 1953, from which the distortion prior to 1938 may be judged. Diagram 1 displays a continuous record of marriage rates by age from 1911 to 1953, the rates shown from 1911 to 1937 being based on All Marriages and those from 1938 on First Marriages.

Table XXV.—Marriage Rates of Women, by Age, 1911, 1931 and 1938 to 1953, England and Wales

Period	Age							Aggregates	
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	20-39	15-49
All Marriages per 1,000 Spinsters, Widows and Divorced Women									
1911	11.2	95.9	109.8	62.6	35.5	22.0	14.8	86.9	54.0
1931	16.9	106.5	119.8	59.6	31.0	18.0	12.6	92.8	57.8
1938	22.6	148.1	154.4	69.9	37.9	21.5	13.8	119.0	71.2
First Marriages per 1,000 Spinsters									
1911	11.2	97.1	109.8	59.2	29.2	16.2	10.4	88.7	54.6
1931	17.1	106.8	119.1	57.2	27.0	14.5	9.6	93.6	59.3
1938	22.6	147.9	154.0	67.2	33.1	16.8	10.6	119.7	72.7
1939	32.0	197.6	188.7	78.4	37.2	18.6	11.5	150.8	90.3
1940	38.4	222.8	198.8	84.7	39.1	20.9	12.0	164.8	100.4
1941	36.3	188.9	155.1	70.3	35.1	20.6	12.1	136.5	85.0
1942	38.9	187.4	133.2	63.0	33.7	20.2	12.3	129.8	82.3
1943	34.2	141.2	101.7	54.0	28.1	17.6	11.7	100.6	65.6
1944	33.1	143.1	109.9	53.5	27.9	17.1	11.3	104.3	67.1
1945	40.0	200.6	155.6	71.4	35.4	20.2	13.0	144.4	89.9
1946	33.9	189.0	150.7	84.5	42.3	22.9	14.4	142.5	86.4
1947	36.7	205.5	157.7	85.1	42.5	22.8	13.6	152.1	91.1
1948	39.4	212.5	158.1	81.3	42.7	22.6	13.4	156.0	92.9
1949	40.5	212.0	145.6	81.8	40.4	21.3	13.1	153.9	91.3
1939-49*	36.7	191.0	150.5	73.5	36.8	20.4	12.6	139.6	85.7
1950	39.3	208.9	156.0	72.9	38.7	20.3	12.7	152.5	89.4
1951	41.3	219.6	156.4	76.6	39.9	21.3	12.8	159.7	93.2
1952	40.6	221.2	155.7	74.8	38.8	20.7	13.1	160.2	92.2
1953	42.4	231.0	152.3	74.0	36.9	20.9	12.3	164.2	93.5

* Annual Averages

Diagram 1.—Marriage Rates* of Women, by age, 1911 to 1953, England and Wales (see text)



* 1911-37 : All marriages per 1,000 spinsters, widows and divorced women.

1938-53 : First marriages per 1,000 spinsters.

Before 1911, when the diagram commences, a long decline brought the rates down from 1873, when the highest rate in the nineteenth century was recorded, to 1909, when the lowest rate up to that time was recorded. Rates rose slightly from 1909 to 1914, when the trend became obscure owing to the wide fluctuations associated with the First World War. After the war no clear trend was observed until 1932, when a steady improvement began and was continued until 1938. At this point, judging by the fragmentary evidence available, a full recovery had been made to the 1873 peak. The fluctuations of war again intervened to obscure the trend but, as may be seen from Table XXV, the annual average rates over the disturbed period of 1939-49 were, at the aggregated ages, substantially in excess of those for 1938; indeed, for almost every individual age-group the 1939-49 average rates exceed those for 1938. Generally the 1950 rates, whilst above the 1939-49 averages, were below those of 1949, indicating that, although very high, the rates were still declining from the post-war peak. The 1951 rates were slightly above those of 1950, suggesting that this decline had been halted. In 1952 the rates increased further at ages 20-24 but at ages 15-19 and at ages above 25 the rates were reduced; in consequence the aggregate rate for 20-39 increased while that for 15-49 declined. In 1953 first marriage rates were above those of 1952 at ages 15-24 and lower at ages 25-39 (the fluctuations at ages above 40 are not numerically important); and the average rates at ages 20-39 and 15-49 were higher.

The marriage history of recent years is remarkable in that for about 15 years marriage rates on average have been maintained above the highest level ever reached in the nineteenth century, even for a single year. This long continued maintenance of high marriage rates produces important changes. Under such circumstances the population is depleted more and more of its non-married element and those non-married persons whose inclinations or health do not favour marriage form an increasing proportion of the non-married group as a

whole, i.e. all those nominally at risk. Even the maintenance of constant marriage rates by those more appropriately regarded as at risk would not in these circumstances prevent a decline in the rates calculated on the basis of all non-married of marriageable age. For this reason a decline in nominal rates has been expected. For first marriages this decline has as yet only affected the older ages.

During the nineteenth century the marriage rate for the age-group 20-24 always exceeded that for the next older group 25-29. In 1901 this position was reversed, the older group recording a higher rate for the first time. Diagram 1 shows that the younger women regained their earlier lead in 1939 and have retained it. As the majority of brides' ages lie between 20 and 30, changes in the relative marriage incidence in the two quinary age-groups within this range, viz. 20-24 and 25-29, are indications of changes in the average age at marriage, which has an influence on the ultimate size of families. After 1939 the younger age-group increased its lead over the older group, and a wide gap opened up between them so rapidly that some part must be attributed to abnormal conditions associated with the war. However, at least one of the conditions which has enabled girls to marry earlier—the changing relationships between the numbers of males and females—may be assumed to be of a persistent nature, and this probably provides an explanation of the fact that the gap is still widening and the average age at marriage is still falling.

Factors Influencing Marriage.—The nature and the probable future course of factors leading to the rise in marriage rates were discussed in the Civil Text Volume of 1940-1945 on pages 38-40, in the 1946-1950 Volume on pages 40-42, and in the 1951 Text on pages 69 and 70. It has been shown that, while the ratio of males to females at ages 15-44 in the total population has been rising continuously since 1921, it has risen still more in the non-married section of the population at these ages. The following statement, based on census populations, shows the changes in sex ratio since 1871.

Males per 1,000 Females :—

	1871	1901	1911	1921	1931	1951
Total population, 15-44	927	923	926	876	915	969
Non-married population, 15-44	967	950	959	875	945	1,120

The abnormally low ratio in 1921 and sharp rise since that year are the striking features of this statement. It will be noted that in 1951 among the non-married aged 15-44, males exceeded females for the first time, even though the sex ratio is based on census populations which exclude the predominantly male armed forces stationed abroad.

The main factors influencing these changes in the sex ratio are generally understood. The proportion of males to females at birth has increased (1911-15, 1,038 per thousand; 1931-35, 1,051 per thousand; 1946-50, 1,061 per thousand) and improvements in infant and child mortality have raised the ratio of male to female survivors. In the early years of the century there was heavy emigration with a male preponderance, and the losses in the First World War fell particularly heavily on young males. On the other hand such male losses as there were in the Second World War were in part offset by the heavy post-war emigration of the wives of Allied Servicemen. Apart from migration and special factors associated with war, it seems likely that the factors producing the current high sex ratio will persist and a further increase in the ratio may be expected.

The numerical superiority of males over females in non-married persons aged 15-44 is not spread evenly over all ages, but is particularly concentrated at the younger ages where marriage rates are highest. Since, on the average, bachelors

marry spinsters 3 or 4 years younger than themselves we may take as an index of relative supply of bridegrooms the ratio of single men aged 20-29 to single women aged 15-24, in the population. In 1911 this ratio was 0.68, in 1931, 0.74, and in 1951, 0.79. This is of course only an approximate index since many marriages occur outside these ranges of ages but it does indicate the trend toward improved marriage prospects for younger women and suggests that the proportions married at younger ages in the female population will be maintained at their high level.

Total Married Women of Reproductive Age.—Illegitimacy being comparatively low in this country the fertility of the community is determined largely by the total number of married women of reproductive age in the population, that is by the survivors of women who married at any time in the preceding 35 years and who have not yet passed out of the childbearing ages. New marriages will continually replenish this number. The annual addition of new marriages in relation to the total married population of reproductive ages represents only a small fraction, of the order of 5 per cent, so that short term changes in the marriage rates will have a correspondingly reduced effect upon the total proportions of married women in the population at those ages. The proportions of married women are shown by quinary age-groups up to age 50 for selected years in Table XXVI.

Table XXVI.—Married Women per 1,000 total Female Population at each Age and Ratio of proportion to that of 1938 taken as 100: 1911, 1931, 1938 and 1946 to 1953, England and Wales

Year	Age							Aggregates	
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	20-39	15-49
Married Women per 1,000 total Female Population									
1911	12	242	558	711	752	755	729	552	502
1931	18	257	587	733	755	749	733	572	529
1938	23	328	643	733	771	768	736	623	566
1946	35	436	696	800	797	784	762	686	626
1947	33	445	714	802	807	785	763	697	635
1948	38	457	730	807	816	791	763	707	643
1949	41	467	736	823	822	795	768	716	651
1950	40	473	762	814	826	801	770	724	657
1951	42	475	769	828	832	812	780	731	666
1952	42	489	778	835	838	819	784	741	673
1953	43	502	785	842	843	826	789	749	678
Ratio of proportion to that of 1938 taken as 100									
1911	52	74	87	97	98	98	99	89	89
1931	78	78	91	100	98	98	100	92	94
1938	100	100	100	100	100	100	100	100	100
1946	152	133	108	109	103	102	104	110	111
1947	143	136	111	109	105	102	104	112	112
1948	165	139	114	110	106	103	104	113	114
1949	178	142	114	112	107	104	104	115	115
1950	174	144	119	111	107	104	105	116	116
1951	183	145	120	113	108	106	106	117	118
1952	183	149	121	114	109	107	107	119	119
1953	187	153	122	115	109	108	107	120	120

Throughout the period covered by the table the proportions married in the total female population have increased at each age-group and these increases have been outstanding at ages under 25. The proportion in 1953 exceeded that of 1938 by no less than 87 per cent at age 15-19 and 53 per cent at age 20-24. An increase of 22 per cent at age 25-29 is less striking but hardly less significant, applying as it does to larger proportions married. At the younger ages the major part of the increase occurred between 1938 and 1946, and though an upward trend continues the pace is very much diminished.

The remarkable rise in the proportions at the younger ages and the much more modest increases at the older ages bring into relief two important changes—more women are marrying, and they are marrying at younger ages.

In any particular year the proportions married increase with advancing age, at first very rapidly and then more slowly, to a maximum close to age 35. They then decline slowly as new marriages are increasingly offset by widowhoods but the total reduction in the proportion up to age 50 is relatively small.

The last two columns of Table XXVI show the proportion of married women in the reproductive age-group 15-49 as a whole and in the more critical group 20-39, among whom 90 per cent of births occur. The proportions represent the fractions of the reproductive years which fall within married life. From 1911 to 1931 this proportion rose slightly from 50·2 to 52·9 and it rose more rapidly between 1932 and 1938 to 56·6. By 1946 it had reached 62·6 and by 1953 67·8. In the age-group 20-39, the proportion had risen from 55·2 in 1911 to 74·9 in 1953.

These increases have been exaggerated by the ageing of the population in the 15-49 group since 1911 which has tended to increase the relative number of women at the older ages within the group, i.e. where the proportion married is greater. To remove this distortion a marriage index for the year can be calculated by expressing the actual number of married as a ratio to the number which would have emerged as married, if the populations in the component quinary age-groups had been subject to standard proportions married in those age-groups, viz., those for 1911. The difference of this ratio from unity thus indicates changes in the proportions married apart from that due to ageing.

Marriage indices standardised on 1911 proportions married within successive quinary age-groups from 15 to 49, with the corresponding unstandardised figures, are shown below:—

	1911	1931	1938	1946	1947	1948	1949	1950	1951	1952	1953
Standardised ...	1·000	1·022	1·067	1·146	1·154	1·168	1·180	1·188	1·200	1·212	1·222
Unstandardised	1·000	1·054	1·127	1·247	1·265	1·281	1·297	1·309	1·327	1·341	1·351

The correction for ageing shows that the true increase in the proportion married among the women aged 15-49 between 1911 and 1953 was 22·2 per cent instead of the 35·1 per cent suggested by the crude proportions, over one-third of the latter increase being due to the ageing of the population and unrelated to the incidence of marriage. If comparison is confined to the narrower age-group 20-39, where clearly the effect of ageing is correspondingly restricted, standardisation only reduces the excess of 1953 over 1911 from 35·7 per cent to 30·5 per cent.

The fact that such a high degree of marriage has been attained is important. There is no sign yet of any recession in the proportions. On the contrary it would not be necessary for rates of new marriages to be as high as in the years immediately preceding 1951 to achieve further increases in the proportion of married women in the population aged 15-49. The marriage rates experienced

before the war would not however suffice for this purpose. This may help to put the reductions in some of the specific marriage rates in 1953 in proper perspective.

Seasonal Incidence of Marriage

Table D of Part II, 1953, shows the number of marriages registered in England and Wales and the rates per 1,000 population in each quarter in serial form for decennial periods from 1841 and for each year 1941 to 1953. In the same volume the monthly incidence for marriages is shown for each year 1947 to 1953 in Table N.

Throughout the nineteenth century the highest marriage rates occurred consistently in the December quarter and the lowest in the March quarter. Between the two World Wars a new pattern emerged and almost without exception the two summer quarters became the highest and the two winter quarters the lowest. The March quarter has generally been that of lowest marriage incidence, but the incidence rises and relativity is disturbed when Easter happens to fall within that quarter.

Since the Second World War, in addition to the temporary shift from the June to March quarters in the years when Easter fell in the March quarter, there has also been a transference of marriages from the June to March quarters of a more permanent and progressive character. The disturbance of two March Easters in this short period obscures this trend and an approximate correction for this disturbance is desirable to clarify the picture.

In pre-war years, the last two March Easters occurred in 1932 and 1937. The incidence of marriages in the March and June quarters in these years and in those immediately preceding and succeeding them, expressed as a percentage of one-fourth of the annual total of marriages, was as follows:—

Year	March Qtr.	June Qtr.	Year	March Qtr.	June Qtr.
1931	60	109	1936	56	114
1932	81	90	1937	79	89
1933	57	108	1938	58	113

According to these data, a March Easter leads to a transfer of an average of 22 from the June to the March quarter index. This adjustment has been made to the figures for 1948 and 1951 (when Easter fell in the March quarter), to provide the following set of figures from 1946 to 1953, (again related to a quarterly average of 100). These indices are comparable in the sense that they have been freed from Easter disturbance.

Year		1946	1947	1948	1949	1950	1951	1952	1953
March Quarter	..	81	75	74	87	97	100	122	109
June Quarter	..	105	109	116	102	90	96	80	89

The possible weakness of the assumption on which the 1948 and 1951 figures have been adjusted, namely that the effect of a March Easter in these years was the same as in 1932 and 1937, must be borne in mind but it is evident that a persisting change has been taking place since 1947 or 1948. The monthly incidence of marriages, available for the years from 1947, throws some further light on this. Account must however be taken of the varying lengths of months by calculating daily averages, and Table XXVII shows the daily average of marriages registered in England and Wales in each month and the ratio of the daily average for the month to the daily average for the year from 1948 to 1953.

Table XXVII.—Comparison of Marriage Incidence by calendar months, 1948 to 1953, England and Wales

	Daily Average Number of Marriages in each Month						Ratio of Daily Average Number of Marriages for the month to Daily Average for the year taken as 1,000					
	1948	1949	1950	1951	1952	1953	1948	1949	1950	1951	1952	1953
January	741	696	497	464	451	513	684	677	506	470	473	543
February	711	796	773	639	787	745	656	774	787	647	825	788
March	1,673*	1,223	1,608	2,493*	2,253	1,834	1,543*	1,190	1,637	2,523*	2,362	1,941
April	858	1,308	1,047	475	743	1,008	792	1,272	1,066	481	779	1,067
May	857	527	591	567	571	607	791	513	602	574	599	642
June	1,351	1,332	1,033	1,152	983	936	1,246	1,296	1,052	1,166	1,030	990
July	1,492	1,364	1,204	1,065	1,010	1,059	1,376	1,327	1,226	1,078	1,059	1,121
August	1,140	1,064	1,134	1,139	1,213	1,234	1,052	1,035	1,155	1,153	1,271	1,306
September	1,386	1,304	1,412	1,432	1,151	1,151	1,279	1,268	1,438	1,449	1,206	1,218
October	911	864	700	681	659	747	840	840	713	689	691	790
November	671	598	563	525	605	516	619	582	573	531	634	546
December	1,196	1,244	1,208	1,177	1,006	968	1,103	1,210	1,230	1,191	1,055	1,024
Year	1,084	1,028	982	988	954	945	1,000	1,000	1,000	1,000	1,000	1,000

* Easter fell in March in 1948 and 1951.

Apart from the effect of a March Easter which appears to bring forward marriages from the June quarter to this month, there has been a tendency since the war for marriages to occur relatively more frequently in March and less frequently in later months of the year; it is assumed that this is at least in part a reflection of a desire to take advantage of maximum Income Tax relief. The concentration in March was especially marked in 1952.

Apart from this feature the influence of Easter and Christmas is also clearly discernible in March (or April) and December. The relative incidence is also naturally high in the holiday months, June to September.

Marriage Incidence in different parts of the Country

The number of marriages and the marriage rates in regions, counties and county boroughs for each year are published in Table F of the successive issues of Part II. Up to 1949 classification was by Geographical Regions and from 1950 by Standard Regions, but Appendix F to Part II for 1946 to 1949 provides an additional tabulation by Standard Regions.

It has frequently been stressed in previous Reviews that the significance of differences in local marriage rates is reduced by the fact that the district in which the marriage is registered is often the district of residence of only one of the parties and sometimes of neither, though this weakness would be less in comparisons between large sections of the country than between small local areas. Another difficulty arises from the fact that marriage rates for local areas were calculated upon civilian populations up to 1949, and upon home populations (that is including the armed forces stationed in the area) from 1950, though in these and other years the parties to the marriage would include members of the armed forces, whether stationed at home or abroad. To minimise distortion from this source, ratios of local rates to the national rate for each year may be considered, as shown in Table XXVIII.

The attraction of London for marriage has always been reflected in the statistics. In the years immediately preceding the war about 12½ per cent of the total marriages of the country were registered in London, giving it a marriage rate about 25 per cent higher than that of the country as a whole. Since the war the London population has remained much below its pre-war level, so that although only 9½ per cent of all marriages are registered in London, the marriage rate is still about 25 per cent above the national level.

Table XXVIII.—Ratio of Marriage Rates in Standard Regions of England and Wales to that of the whole country, 1948 to 1953

Region	Ratio of Regional to National Rate taken as 1,000						Ranking of Ratio					
	1948	1949	1950	1951	1952	1953	1948	1949	1950	1951	1952	1953
England and Wales ..	1,000	1,000	1,000	1,000	1,000	1,000						
Regional Summary:												
Northern	1,018	1,033	1,032	1,031	1,051	1,048	3	2	2	2	2	2
East and West Ridings ..	1,026	1,037	1,024	1,030	1,025	1,028	2	1	3	3	4	3
North Western	1,006	1,017	1,009	1,002	1,005	996	7	6	6	5	6	6
North Midland	1,013	1,016	1,019	997	994	992	4	7	5	7	7	7
Midland	1,010	1,021	1,021	1,027	1,011	1,000	6	4	4	4	5	5
Eastern	874	859	866	851	852	855	11	11	11	11	11	11
London and South Eastern ..	1,040	1,028	1,041	1,054	1,055	1,067	1	3	1	1	1	1
County of London ..	1,247	1,225	1,237	1,253	1,253	1,258						
Southern	961	950	932	942	924	930	8	8	8	8	8	8
South Western	931	922	926	917	917	922	9	9	10	9	9	9
Wales I (South East)	1,012	1,018	999	998	1,043	1,018	5	5	7	6	3	4
Wales II (Remainder)	906	913	930	915	894	898	10	10	9	10	10	10

The unique position of London dependent, as it is in part, upon the attraction of a London wedding for those resident elsewhere is an outstanding feature of the table. The rate in the Eastern region, some 12 to 15 per cent below the national average, is also notable. Other rural regions—Southern, South Western and Wales II—also show low rates, 7, 8 and 10 per cent respectively below the average in 1953. There are no other important differences. It may be seen from the ranking orders on the right-hand side of the table that the regions do tend to maintain their relative positions from year to year.

WIDOWHOOD AND WIDOWERHOOD

Detailed commentary on widowhood and widowerhood was included in the 1940-1945 Civil Text, pages 47 to 52, to which reference should be made for an introductory discussion on the peculiarities of these statistics with special reference to the alternative classes of "not stated" cases which may arise and such sources of information as there are on these cases. In that commentary the concept of widowhood rates (defined as "The number of widows in a given age-group, produced by the death of a husband in the current year, expressed as a proportion of all wives of that age") was introduced, and it is retained in the present commentary. A similar concept applies to widowerhood. Further commentary was contained in the 1946-1950 Civil Text on pages 51 to 53 and in the 1951 Text on pages 78 and 79.

In Table SS of Part II the number of marriages terminated by the death of a spouse are given by joint ages of the deceased and the surviving spouse. Only cases of deaths in which marital condition was stated are included in the table, but the proportion of "not stated" to "stated" marital condition is given for each age of deceased. It has been a feature of these statistics, since they were first collected in 1938, that this "not stated" proportion has been very low for female deaths, a small fraction of one per cent, but has been substantial for male deaths, particularly for ages under 30. Table XXIX shows the "not stated" proportions for males for the years 1938 and 1945 to 1953.

**Table XXIX.—Percentage "not stated" to "stated" marital condition—
Deceased Men, 1938, 1945 to 1953, England and Wales**

Age of Deceased			1938	1945	1946	1947	1948	1949	1950	1951	1952	1953
All Ages	..		8.2	5.4	5.5	5.5	5.4	5.0	4.9	4.9	4.5	4.3
15—	..	..	22.7	13.8	15.3	13.8	10.8	12.8	19.6	14.8	8.7	9.3
20—	..	..	40.4	15.0	20.7	28.8	27.7	28.9	40.4	47.2	49.3	51.6
25—	..	..	31.5	14.1	21.2	24.6	22.8	24.8	28.6	35.1	34.3	33.9
30—	..	..	28.6	16.0	20.5	20.3	20.0	19.7	19.7	21.7	23.9	21.7
35—	..	..	22.2	14.7	16.2	16.3	16.4	16.2	14.8	16.3	17.4	16.9
40—	..	..	17.4	12.2	13.7	14.7	13.1	12.6	12.4	12.0	12.3	11.7
45—	..	..	16.5	10.1	9.9	11.0	9.7	9.8	9.5	9.3	8.6	8.3
50—	..	..	12.6	8.3	8.2	8.2	8.5	7.3	6.8	7.0	6.4	6.0
55—	..	..	10.3	7.1	6.6	6.7	6.8	5.9	5.7	5.3	5.3	4.6
60—	..	..	8.3	5.8	6.0	5.9	5.6	5.0	4.8	4.9	4.3	4.0
65—	..	..	6.2	5.0	4.6	4.9	4.6	4.0	3.9	4.0	3.6	3.3
70—	..	..	5.2	4.5	4.4	4.3	3.9	3.5	3.4	3.5	3.1	3.1
75 and over	..		4.3	4.1	4.0	3.8	3.5	3.4	3.4	3.2	2.9	2.8

From 1938 to 1945 there was a more or less general and steady decrease in the percentage "not stated". It may be seen from Table XXIX that since 1945 there has been a tendency for the percentage to continue decreasing at ages over 45, but to increase at ages under 40, and in 1953 at ages 20-24 and 25-29 the percentages exceeded those originally recorded in 1938. Failure to indicate marital condition is more likely for bachelors than for married men whose widows are commonly the informants. If this is so, proportional allocation of the non-stated cases will lead to some bias, and to this extent the rates for males given later must be accepted with some caution at the younger ages.

Table XXX.—Widowerhoods per 1,000 Married Men and Widowhoods per 1,000 Married Women in each age-group, 1939, 1946 to 1953, England and Wales

Age of Surviving Spouse			1939	1946-49	1950	1951	1952	1953	1939	1946-49	1950	1951	1952	1953
			Widowerhoods per 1,000 Married Men						Widowhoods per 1,000 Married Women*					
All Ages	..	..	8.7	7.5	7.5	7.8	7.0	7.0	14.3	13.4	13.8	14.8	13.6	13.7
Under 25	..	..	2.1	1.5	1.0	0.8	0.7	0.6	1.8	1.2	1.0	0.9	0.9	0.8
25-	..	..	2.3	1.5	1.1	0.9	0.8	0.8	2.0	1.7	1.4	1.3	1.2	1.2
30-	..	..	2.3	1.6	1.3	1.1	1.0	1.0	2.8	2.2	1.9	1.9	1.8	1.7
35-	..	..	2.8	2.0	1.6	1.5	1.4	1.3	4.4	3.3	3.0	3.1	2.9	2.8
40-	..	..	3.6	2.5	2.2	2.2	2.0	2.0	6.6	5.3	4.9	5.1	4.7	4.6
45-	..	..	4.9	3.9	3.6	3.4	3.1	3.0	10.3	9.1	8.7	8.8	8.2	7.8
50-	..	..	7.4	5.8	5.4	5.5	5.2	5.0	16.0	14.3	14.2	15.6	14.2	14.2
55-	..	..	10.5	8.7	8.4	8.6	7.5	7.7	22.9	21.1	21.6	23.3	21.5	21.4
60-	..	..	16.5	13.8	13.2	13.9	12.3	12.1	35.0	32.9	33.6	37.8	32.8	33.0
65-	..	..	24.8	21.0	21.1	21.8	19.7	19.8	49.6	46.6	49.1	53.8	48.0	49.2
70-	..	..	37.3	32.6	34.2	35.9	31.6	30.9	72.1	69.3	71.7	72.3	69.4	70.2
75 and over	..	..	73.3	57.9	61.0	66.1	57.9	58.6	126.4	92.5	106.5	118.6	106.5	108.2

* Non-civilian casualties were not classified by marital condition before 1950. An approximate allowance has been made for them by rateable allocation in earlier years.

Table XXX shows widowhood and widowerhood rates by age for selected periods from 1939 to 1953. These rates are different in character from published death rates because they derive solely from the deaths of married persons and the latter represent selected lives mainly because they exclude persons whose health denies them the opportunity of marriage. Nevertheless these rates reflect in general the sex and age distribution and annual changes of mortality rates and much of the commentary on mortality rates contained in the medical parts of this Review is relevant to them.

For demographic purposes, however, it is not the nature of small differentials within the main structure of widowhood and widowerhood rates that is important, but the general level of these rates. It is clear that the current level of mortality at ages under 45 is so low that the termination of marriages by the death of one or other of the partners is not significantly depleting the younger married population or, in particular, the population of married women in the reproductive ages.

DIVORCES AND REMARRIAGE OF DIVORCED PERSONS

Divorces

Divorce statistics were shown in Tables O and P in Part II up to 1949, and more detailed statistics have been shown in Tables O and P1 to P4 since 1950. A detailed analysis of and commentary on divorce statistics was included in the 1946-50 Civil Text on pages 54 to 67 and in the 1951 Text on pages 80 and 81.

For the study of the trend of divorce statistics it is better to examine the annual incidence of petitions filed, rather than of decrees absolute granted, since the former are less liable to disturbance from purely administrative changes in procedure and also respond more quickly to real changes in influences tending to change the incidence of divorce.

During the period 1938-1950 the annual incidence of petitions for divorce underwent sharp fluctuations, mainly due to the effect of the war. A further disturbing factor was introduced on 2nd October, 1950, by the Legal Aid and Advice Act, 1949, which extended the facilities for divorce of persons of limited means. The trend of the incidence of divorce over the period 1950-52 may therefore be compared on the one hand with that in the years following the First World War, and on the other hand with that in the years around 1926 when the Poor Persons Rules, 1925, came into operation—Rules which in some respects disturbed divorce incidence in a manner similar to that which may be expected from the operation of the Legal Aid and Advice Act, 1949. In Table XXXI is shown the number of petitions filed and decrees absolute granted in each year from 1918 to 1930 and from 1945 to 1953.

Table XXXI.—Petitioning for Divorce and Decrees Absolute granted, 1918 to 1930 and 1945 to 1953, England and Wales

Year	Divorce Petitions filed (dis- solution and nullity)	Decrees Absolute granted (dissolu- tion and nullity)	Year	Divorce Petitions filed (dis- solution and nullity)	Decrees Absolute granted (dissolu- tion and nullity)
(End of First World War)			(End of Second World War)		
1918	2,362	1,111	1945	25,711	15,634
1919	5,184	1,654	1946	43,163	29,829
1920	4,565	3,090	1947	48,501	60,254
1921	2,907	3,522	1948	37,919	43,698
1922	2,468	2,588	1949	35,191	34,856
1923	2,833	2,667	1950	29,729	30,870
1924	2,978	2,286	(Legal Aid and Advice Act, 1949)†		
1925	3,054	2,605	1951	38,382	28,767
(Poor Persons Rules, 1925)*			1952	34,567	33,922
1926	3,631	2,622	1953	30,542	30,326
1927	4,294	3,190			
1928	4,050	4,018			
1929	3,997	3,396			
1930	4,288	3,563			

* Came into operation on 6th April, 1926.

† Came into operation on 2nd October, 1950.

After the First World War, the incidence of divorce petitioning rose steeply to a peak in 1919 and then rapidly declined. After 1922 the numbers increased more or less steadily but gradually each year until the introduction of the Poor Persons Rules, 1925, intervened. After the Second World War the number of petitions involved each year was about ten times as great as before but, so far as has yet been revealed, the pattern followed has been somewhat similar. After a steep rise a peak of over 48 thousand petitions was reached in 1947, and a steep decline had brought the figure down to 30 thousand by 1950. It does not seem unreasonable to assume that, in the absence of the Legal Aid and Advice Act, 1949, or any other disturbing factor, a figure slightly in excess of 30 thousand might have been recorded in 1951.

Whereas the Legal Aid and Advice Act, 1949, positively increased the facilities for divorce available to persons of limited means, the Poor Persons Rules, 1925, merely altered the procedure by which the then existing facilities were made available. Nevertheless it is thought that their influence may have been similar in some respects since, as a result of publicity, they enhanced existing facilities by making those requiring help aware of its availability. An examination of the petitions filed in the years from 1925 to 1930 in Table XXXI will show that the introduction of the Rules led to a steeper rise in the annual incidence of divorce petitioning than was experienced from 1922 to 1925, though far less steep than that immediately following the war. After a minor peak, there was a decline to 1929, after which a gradually increasing trend was again resumed. Close similarity to this experience must not be expected in the years following 1951, since for one thing the two procedures were introduced in widely different months—April and October, but at least a peak, a decline, and the later resumption of a rising trend were to be expected in the absence of further disturbing factors; of these phases the first two have occurred.

The difficulty, to which attention was drawn above, in following the trend of divorce from the incidence of decrees absolute may be seen from Table XXXI. The peak in divorce petitioning after the First World War was reached in 1919; the peak in the granting of decrees absolute was not reached until two years later. Following the introduction of the Poor Persons Rules, 1925, a peak in petitioning was reached in 1927, but not until the next year was the peak reached in the granting of decrees absolute. Since the Second World War a number of changes have been made in the procedure for obtaining a decree absolute and their influence may be seen from the violent fluctuations in the incidence of decrees absolute in the period 1945 to 1953.

A detailed analysis and commentary on divorce rates by current ages of husband and wife in combination, by current age of wife and duration of marriage, by age of wife at marriage and duration of marriage and by current age of wife and size of family was included in the 1946-50 Civil Text on pages 62 to 67.

Remarriage of Divorced Persons

One aspect of divorce which is of importance is its impact upon the number of married persons in the population and thus upon the incidence of legitimate births. It is, however, necessary to examine together the incidence of divorce and of remarriage of divorced persons since only the net effect of these two forces actually reduces the married population.

The general trend of the numbers of married persons who were divorced and of divorced persons who remarried is shown in Table XXXII.

Table XXXII.—Annual Number of Persons Divorced and of Divorced Persons who Remarried, 1926 to 1953, England and Wales

Period	Number of persons divorced in the period	Number of divorced persons who remarried in the period							
		Persons	Men	Women	Divorced men marrying spinsters	Divorced men marrying widows	Divorced men and women inter-marrying	Divorced women marrying bachelors	Divorced women marrying widowers
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1926-30	6,716	3,917	2,128	1,789	1,662	270	392	1,225	368
1931-35	8,022	5,154	2,777	2,377	2,179	302	592	1,597	484
1936-40	12,361	8,558	4,580	3,978	3,641	464	949	2,746	758
1941-45	20,778	12,548	7,093	5,455	5,453	874	1,532	3,587	1,102
1946-50	79,803	48,898	26,273	22,625	17,767	3,303	10,406	14,271	3,151
Averages {									
1936	8,114	6,468	3,507	2,961	2,788	354	730	2,009	587
1937	9,772	6,988	3,759	3,229	2,964	374	842	2,192	616
1938	12,500	8,179	4,404	3,775	3,467	471	932	2,576	733
1939	15,910	10,698	5,715	4,983	4,558	550	1,214	3,480	896
1940	15,510	10,458	5,514	4,944	4,430	571	1,026	3,474	957
1941	12,736	9,378	5,091	4,287	4,028	575	976	2,900	899
1942	15,236	9,706	5,437	4,269	4,214	664	1,118	2,815	895
1943	20,024	11,049	6,157	4,892	4,712	797	1,296	3,237	1,007
1944	24,624	13,728	7,914	5,814	6,009	981	1,848	3,693	1,197
1945	31,268	18,879	10,867	8,012	8,303	1,355	2,418	5,292	1,511
1946	59,658	29,636	16,479	13,157	11,781	2,287	4,822	8,596	2,150
1947	120,508	56,945	30,751	26,194	21,272	3,980	10,998	17,277	3,418
1948	87,396	58,728	31,201	27,527	21,072	3,812	12,634	17,541	3,669
1949	69,712	51,494	27,645	23,849	18,150	3,400	12,190	14,435	3,319
1950	61,740	47,687	25,290	22,397	16,558	3,038	11,388	13,503	3,200
1951	57,534	44,171	23,110	21,061	14,809	2,880	10,842	12,524	3,116
1952	67,844	46,098	23,719	22,379	14,861	2,965	11,786	13,071	3,415
1953	60,652	43,989	22,557	21,432	14,114	2,798	11,290	12,349	3,438

Expressed as percentages of the number of persons divorced in the same period the averages for the quinquennial periods 1926-30 to 1946-50 and the single years 1947 to 1953 of remarriages of divorced persons (columns (2) and (3) of Table XXXII) were:—

	1926-30	1931-35	1936-40	1941-45	1946-50
	58·3	64·2	69·2	60·4	61·3
1947	47·3	67·2	73·9	77·2	76·8
1948					
1949					
1950					
1951					
1952					
1953					

Divorced persons who remarry during any period are not confined to those granted a decree absolute during the same period, so that the above figures do not precisely represent the proportion of divorced persons who ultimately remarry. Most of these figures will understate the true proportion, though perhaps not by a substantial amount when the rate of increase of divorces is slow. The figures for the years 1948-51 after the abrupt peak in divorce incidence in 1947 may, however, overstate the proportion. These disturbances apart, the figures suggest that the proportion of divorced persons who ultimately remarry is rising, and is perhaps in the region of two-thirds to three-quarters, so that the net loss to the married population is only a small fraction of the total number divorced.

Throughout the period covered by Table XXXII the number of divorced men who remarried exceeded that of divorced women who remarried, the latter being about 86 per 100 men. The percentage ratios of divorced women to divorced men among those remarrying rose slightly between 1926-30 and 1936-40 from 84·1 to 86·9, fell to 76·9 in 1941-45, rose to 86·1 in 1946-50, 91·1 in 1951, 94·4 in 1952 and 95·0 in 1953.

GENERAL MORTALITY

Number of Deaths

In 1953 a total of 503,529 deaths was registered in England and Wales, 259,490 being of males and 244,039 being of females. Deaths of non-civilians are included in these figures. There were 6,045 more deaths registered in 1953 than in the previous year, an increase of just over 1 per cent, but after adjustment for changes in sex and age constitution of the population, the increase becomes one of 0.1 per cent.

Mortality Rates—Definitions

The crude death rates and the standardised rates used for various purposes have been fully discussed from time to time in previous reports. Brief definitions of the principal rates are given below.

Crude death rates represent the total number of deaths from all causes, or from particular causes, registered during the year per thousand or per million of the home population at the middle of the year. The home population, of which estimates are given in Tables 1, 2, and 12 of Part I, comprises the civilian population together with members of British, Commonwealth, and foreign armed forces stationed in the country, but excluding those stationed abroad. In calculating rates for local areas the deaths are corrected for transfers to the place of residence of the deceased, but the resultant rates are considerably influenced in some cases by the definition of place of residence. Until 1953, this was based on rules prepared in 1933, except that a modification was introduced during 1952 whereby accommodation provided under Parts III and IV of the National Assistance Act, 1948, was deemed to be the usual residence of those living there, whereas previously deaths in such accommodation had been "transferred" to the previous place of residence. From the beginning of 1953, new rules were introduced as shown on page xii. The most important changes introduced by these rules were that all deaths in hospitals for the chronic sick and in mental and mental deficiency hospitals were for the first time assigned to the area of the hospital, whether or not the patients had originally been admitted from that area. This practice has substantially increased the apparent death rates for certain areas. Because it was found that, in practice, the term chronic sick hospital covered a very wide range of hospitals, in some of which a relatively short duration of stay was normal, the rule was modified in 1954, but the definition of "place of residence" for the purpose of 1953 statistics was as set out on page xiii. Annual crude death rates from all causes are given in Table 3 of Part I for England and Wales, and in Table 12 of Part I for local authority areas.

Death rates in sex and age groups represent the numbers of deaths registered of persons in each sex-age-group per thousand or per million of the estimated number of persons in that sex-age-group alive at the middle of the year. Exceptions to the use of estimated populations as denominators are the infant mortality rates, which are based upon the appropriate numbers of live births, and certain death rates connected with childbearing, which are based on the appropriate numbers of live and stillbirths. Death rates from all causes in sex and age groups are given in Table 4 of Part I for England and Wales from 1841 to 1953.

Deaths from all causes and from separate causes are given in sex and age groups in Table 17 to 19 of Part I for 1953 for England and Wales, Standard Regions, and aggregate summary (by type of area) and can be used with the corresponding mid-year populations given in Tables 1 and 2 to derive sex-age-rates for particular classes for these areas.

The **Comparative Mortality Index (C.M.I.)** has replaced the standardised death rate which was used formerly for the purpose of measuring the trend of mortality from all causes or from a particular cause over a period of time. The method of calculation and a discussion of its advantages over the conventional standardised death rate may be found on pages 6-11 of the Medical Text volume for 1940-45. The C.M.I. represents the ratio between adjusted death rates for the year in question and of a base year, at present 1938, each calculated by weighting the death rates for the various sex-age-groups by the mean of the corresponding proportions of the population living in the two years. The C.M.I.'s for all causes of death are shown in Table 3 of Part I from 1841, and for separate causes in Tables 6 and 9.

Two further ratios that are associated to some degree with the C.M.I. but are not to be confused with it are (a) **the adjusted ratios of male to female mortality**, shown in Table 3 of Part I, which are obtained by the application of a formula similar to that of the C.M.I. but with the death rates and relative proportions of males and females in the population in the year in question substituted for the specified year and base year rates and populations used in the C.M.I., and (b) **the mortality ratios** for each year or period of years shown in Table 4 of Part I, which are the ratios between the C.M.I. of the period specified and that of the period immediately prior to it.

The **Equivalent Average Death Rate (E.A.D.R.)** is the arithmetic mean of the rates for quinary age-groups up to some convenient limit such as 65, this being equivalent to calculating a standardised death rate at ages under 65 based upon a population uniformly distributed over the 13 age-groups. This type of rate provides a simple but adequate standardisation by age for many purposes of comparison between areas or population groups, or over a period of time.

The **Standardised Mortality Ratio (S.M.R.)** enables comparisons to be made between the mortality rates of different sections of the population in a given period, the most important use being in connection with occupational mortality, but it is also used occasionally for studies in area mortality. The S.M.R. is constructed by an indirect method of standardisation, i.e. by the application of standard death rates to populations with varying age structures, and represents the number of deaths registered in a given occupation, for example, expressed as a percentage of the number of deaths that might have been expected to occur if the given occupation had experienced within each age-group the same death rate as that of a standard population comprising, say, all occupations. The S.M.R. is more often used nowadays than the **Comparative Mortality Figure (C.M.F.)** which is derived by a process of direct standardisation, i.e. by the application of variable age-death rates to a population of standard age structure. As used formerly in occupational mortality studies the C.M.F. represented the number of deaths that would occur in a given occupation if its population, in size and age structure, were equivalent to a standard population (all occupations) in which occurred 1,000 deaths.

Area Comparability Factors (A.C.F.) are given in Table 12 of Part I for local authority areas to facilitate sex-age standardised mortality comparison between different areas in the same year. In deriving the A.C.F. of a local area a hypothetical local death rate is first calculated, for a base period for which the sex-age structure of the local population is known, by applying national death rates

of this period by sex and age to the local populations in the corresponding sex-age groups. The A.C.F. is the ratio of the mean crude death rate of England and Wales for this base period (which may be of 2 or 3 years duration) to the corresponding hypothetical local rate. The A.C.F.'s were first published in the 1934 Review (Table E of Part II) based on local age structure as given in the 1931 census and national death rates for 1930-32. These factors were used until 1939, when the series was discontinued for 10 years. In 1949 a new set of factors was introduced based on the December 1947 counts of local civilian populations and deaths in 1947-48 adjusted where significant to include estimated allowances for Armed Forces stationed in the area as well as for boundary changes. These factors have in turn been replaced by A.C.F.'s. based on 1951 census data and the deaths for the years 1950-1952. While comparisons of local area mortality by the application of A.C.F.'s can be accepted as reasonably accurate in most instances for several years after the introduction of newly calculated factors, there may be a few areas with rapidly expanding populations, whose age structures may be changing in a manner different from that of the national population, where the A.C.F.'s. will increasingly fail to reflect these changing sex-age features as the interval from the base date becomes longer.

Local adjusted death rates are obtained by multiplying the local crude rate by the corresponding A.C.F. These adjusted rates are not published, but Table 12, in addition to showing the crude death rate of each local authority area for the year in question and the appropriate A.C.F., gives the **ratio of local adjusted death rate to the national rate**, an index akin to an area Standardised Mortality Ratio in certain respects, but with a unit base of 1.00 instead of 100. These ratios provide a valid basis of comparison between areas of mortality from all causes within the same year, within the limitations of the accuracy of some A.C.F.'s. in certain years. They do not permit of area comparisons in respect of deaths from particular causes, nor do they take account of the influence of certain types of institution, e.g., chronic sick hospitals, on the death rate of the area (see page xii).

Life-table functions of mortality provide another type of measure of mortality from all causes which is not influenced by the age distribution of the population in the year of measurement. Two of the most frequent life-table measures used in a medical context are shown in Tables XXXIV and XXXV (pages 59 and 60) of this Report, viz.

Survivors to age x (l_x) i.e. the numbers who would survive to exact age x out of 10,000 born who were subject throughout their lives to the death probabilities indicated by the death records of a given period;

Expectation of life (e_x) i.e. the average future lifetime which would be lived by persons aged exactly x if subject to the death probabilities indicated by the death records of a given period.

The General Trend of Mortality

Table XXXIII (page 58) shows, for each sex, (a) the crude death rate for all causes and (b) the Comparative Mortality Index for all causes, since 1841. The crude rates in 1953 were 12.2 per thousand males as in the previous year, and 10.7 per thousand females, compared with 10.5 the previous year. From the long-term viewpoint the crude death rates declined considerably during the period from 1871 to 1930, but since then the crude rates have tended to remain fairly steady. However when allowance is made for the increasing proportion of older people in the population, as is done by the C.M.I., it can be seen that improvement in mortality has been maintained to date; mortality of males in 1953 was 79 per cent, and of females 71 per cent of the average recorded in 1931-40.

Life-table and Expectations of Life.

Abridged life tables, relating to the mortality experience of each calendar year, are published annually in the Registrar General's Quarterly Return (usually the issue for the December quarter), and an abridged life table for 1951-53 is shown at Table XXXIV (page 59). This table indicates that, on the basis of mortality during these three years, 66 per cent of males and 78 per cent of females would live to age 65, and that 21 per cent of males and 37 per cent of females would reach 80.

The Expectation of Life is the average number of years of life that will be lived by a group of people of given age, subject to a given mortality experience, if that experience is reproduced in the future, and the expectation of life (e_x^o) at various ages, based on 1951-53, is also shown in Table XXXIV. At birth a boy has an expectation of life of 66·73 years, and a girl 71·88 years. Having survived the perils of the first year, the child's expectation of life in each sex rises to a maximum in the second year of life, thereafter declining steadily with increasing age. At age 65 a man has an expectation of life of 11·71 years, and a woman 14·40 years.

Comparison between those indices for 1951-53 and previous years is made in Table XXXV (page 60) which shows expectation of life at birth and at one year of age, derived from English Life Tables Nos. 1 to 10, and the abridged life tables relating to recent years.

Quarterly Deaths and Death Rates

Table XXXVI (page 60) shows quarterly death rates from all causes by single years since 1931, with comparison of each quarterly rate with the corresponding rate for the whole year. With the exception of 1943 mortality in the first quarter has always been much higher than in the other three, and usually the general level of mortality recorded for any year is determined by the experience of the first three months. Generally the death rate for this quarter can be expected to be some 20 to 30 per cent higher than the annual rate, but as a result of exceptionally cold weather (1947) or influenza epidemics (1951 and 1953) larger departures from the annual average are fairly frequently recorded. In 1953 after an elevation in mortality in the first quarter the death rate for the June quarter was lower than that for any previous June quarter except 1948. The rate for the September quarter equalled the record low rate of the September quarter 1952, and the rate for the December quarter was the lowest ever recorded for that quarter.

Death Rates by Sex and Age

Table XXXVII (page 61) gives death rates from all causes by sex and age since 1841, and more details are available in Table 4 of Part I. Improvement in mortality has been relatively greater at younger than at older ages, and at each age has been greater amongst females than males. The table below shows death rates in 1953 per cent of those in 1901-05 ;

Males								Females							
All ages	0-	5-	15-	25-	45-	65-	85 and over	All ages	0-	5-	15-	25-	45-	65-	85 and over
71	13	18	27	26	60	89	94	71	12	13	17	25	43	70	88

One of the mortality features brought out in Table XXXVII is the increasing excess of male mortality over female at most ages, the ratio of male to female death rates, at different ages, in 1901-05 and in 1953 being as follows:

	All ages	0-	5-	15-	25-	45-	65-	85 and over
1901-05	1.1	1.2	1.0	1.1	1.2	1.3	1.2	1.1
1953	1.1	1.3	1.4	1.8	1.2	1.7	1.5	1.1

Causes of Death at Different Ages

Death rates from certain causes at different ages are shown in Table XXXVIII (page 62). The number of deaths upon which this table has been based will be found on the first page of Table 19 of Part I. Table XXXVIII shows that the disparity between the death rates of males and females at ages 15-24 can be accounted for very largely by the high mortality amongst young men from motor vehicle accidents and from other accidents. Within this age-group the only important cause of death with marked female preponderance was respiratory tuberculosis.

At ages 25-44 the most important group of causes of death were the malignant neoplasms, with the female rate exceeding the male. Deaths from accidental causes continued to be much more frequent amongst males than females, but the rate from respiratory tuberculosis showed only a small male excess.

At ages 45-64 the principal causes of death were the malignant neoplasms, amongst which the rate for cancer of lung was some nine times greater for males than females. Within this age-group deaths from arteriosclerotic (coronary) heart disease begin to come into prominence, particularly amongst males.

The two age groups 65-74 and 75 and over demonstrate similar patterns of causes of death, the principal conditions in each sex being the malignant neoplasms, arteriosclerotic and degenerative heart disease, vascular lesions affecting the central nervous system, bronchitis and pneumonia. Of these only the vascular lesions of the central nervous system fail to show a large excess of male mortality. Causes of death with a distinct female excess at these advanced ages were diabetes mellitus, anæmia, chronic rheumatic heart disease, gastritis and enteritis, and, at ages over 75 only, deaths from accidents not due to motor vehicles.

Causes of death in different parts of England and Wales

Previous Statistical Reviews have repeatedly drawn attention to the variations in total mortality between one part of the country and another, both geographically and in relation to type of area. In the Review for 1952 maps were given to show that, in urban and in rural districts alike, levels of mortality tended to arrange themselves in three broad bands running across the country from south west to north east. High levels of mortality were found in Wales and the northern English counties, intermediate levels in the south west and midlands, and low levels in the south and south east (Text, 1952, pages 68-70). To shed light on the question of whether any particular causes of death are responsible for these variations Tables XXXIX and XL (pages 64 and 66) compare death rates at ages 45-74 from all causes and several groups of important causes in four main regional areas and in their urban and rural components.

In the North of England area the death rates from each cause tended to be higher than the national average, but the causes themselves were distributed very much in the same proportions as for the country as a whole. Individual areas within the region showed a few departures from this pattern, for example, relatively high tuberculosis and cancer of lung death rates in the Merseyside conurbation and high rates from other respiratory diseases in the South East Lancashire conurbation.

In Wales the relative distribution of causes was again broadly similar to the national average, but with a pronounced excess of mortality from tuberculosis in each type of area, particularly rural districts.

In the area comprising the Midlands and the Eastern counties the only departure of note from the average distribution was the relatively high mortality from respiratory diseases in the West Midlands conurbation.

In the South of England area the causes were again broadly similar in their distribution to the country as a whole, but Greater London had some excess mortality from cancer of all forms, from cancer of lung and from respiratory diseases.

Deaths in Institutions

An analysis of deaths in England and Wales in 1953 by cause of death and by type of institution in which death occurred is given in Table XLI (page 67). Of the total of 503,529 deaths registered, 186,026 (37 per cent) were in hospitals (non-mental), mainly belonging to the National Health Service, 13,302 (3 per cent) were in mental hospitals or mental deficiency institutions, 10,488 (2 per cent) were in nursing homes, and 293,713 (58 per cent) occurred in other institutions (schools, prisons, homes for the aged, &c.) at home and elsewhere. The proportion of deaths occurring in each type of institution varies between different causes of death. In the case of arteriosclerotic and degenerative heart disease 20 per cent of the deaths occurred in hospitals (non-mental) and 4 per cent in mental and mental deficiency hospitals; for ulcer of the stomach and duodenum 80 per cent occurred in hospitals (non-mental).

Table XXXIII.—Crude annual death rates per 1,000 living and comparative mortality indices, 1841-1950 and 1941 to 1953

Period	Crude death rate per 1,000 living		Comparative Mortality Index* (1938 base)	
	M	F	M	F
1841-50 ..	23.1	21.6	2.12	2.44
1851-60 ..	23.1	21.4	2.09	2.37
1861-70 ..	23.7	21.4	2.14	2.37
1871-80 ..	22.7	20.1	2.09	2.27
1881-90 ..	20.3	18.1	1.93	2.10
1891-1900 ..	19.3	17.1	1.87	2.01
1901-10 ..	16.4	14.4	1.60	1.69
1911-20 ..	15.1	13.0	1.45	1.49
1921-30 ..	12.9	11.4	1.16	1.22
1931-40 ..	13.0	11.5	1.07	1.10
1941-50 ..	14.1	11.0	0.92	0.89
1941	14.0	11.8	1.10	1.04
1942	12.5	10.5	0.97	0.92
1943	12.7	11.1	0.98	0.94
1944	12.6	10.7	0.95	0.89
1945	12.3	10.7	0.92	0.88
1946	12.2	10.9	0.89	0.88
1947	12.9	11.2	0.92	0.89
1948	11.5	10.1	0.82	0.79
1949	12.3	11.1	0.86	0.85
1950	12.3	11.0	0.85	0.83
1951	13.4	11.8	0.92	0.88
1952	12.2	10.5	0.84	0.78
1953	12.2	10.7	0.84	0.78

* Based upon civilian mortality only during the periods 1914-18 and 1939-49.

Table XXXIV.—Abridged Life Table, 1951-53. England and Wales

Age x			Males		Females	
			1_x	$^o e_x$	1_x	$^o e_x$
0	..	..	10,000	66.73	10,000	71.88
1	..	..	9,686	67.89	9,756	72.68
2	..	..	9,663	67.05	9,736	71.82
3	..	..	9,651	66.13	9,725	70.90
4	..	..	9,640	65.20	9,717	69.96
5	..	..	9,633	64.25	9,711	69.01
10	..	..	9,604	59.44	9,691	64.14
15	..	..	9,579	54.59	9,673	59.26
20	..	..	9,538	49.81	9,647	54.41
25	..	..	9,476	45.12	9,609	49.62
30	..	..	9,413	40.41	9,561	44.85
35	..	..	9,337	35.71	9,499	40.13
40	..	..	9,236	31.08	9,416	35.46
45	..	..	9,085	26.55	9,296	30.89
50	..	..	8,823	22.27	9,113	26.46
55	..	..	8,365	18.35	8,837	22.20
60	..	..	7,661	14.81	8,428	18.16
65	..	..	6,635	11.71	7,809	14.40
70	..	..	5,294	9.04	6,862	11.04
75	..	..	3,735	6.77	5,510	8.14
80	..	..	2,134	4.98	3,736	5.82
85	..	..	886	3.46	1,887	4.07

This abridged life table is constructed from the estimated home population in 1951, 1952 and 1953, and the total deaths registered in those years. The column headed 1_x shows the numbers who would survive to exact age x out of 10,000 born who were subject throughout their lives to the death probabilities indicated by the 1951-1953 death records. Column $^o e_x$ is the "expectation of life", that is, the average future lifetime which would be lived by persons aged exactly x, if likewise subject to these death probabilities.

Table XXXV.—Expectation of life at birth and at age 1 year, 1838-1932 and 1943 to 1953, England and Wales

From Life Table	Year	Expectation of life at			
		Birth		Age 1 year	
		Male	Female	Male	Female
No. 1	1841	40	42	47	48
2	1838-44	40	42	47	47
3	1838-54	40	42	47	47
4	1871-80	41	45	48	50
5	1881-90	44	47	51	53
6	1891-1900	44	48	52	55
7	1901-10	49	52	56	58
8	1910-12	52	55	58	60
9	1920-22	56	60	60	63
10	1930-32	59	63	62	65
From annual Abridged Life Tables	1943	62	67	64	69
	1944	62	68	64	70
	1945	63	69	65	71
	1946	65	69	67	71
	1947	64	69	67	71
	1948	66	71	68	72
	1949	66	71	68	72
	1950	67	71	68	72
	1951	66	71	67	72
	1952	67	72	68	73
	1953	67	72	68	73
	1950-52	66	71	68	72
	1951-53	67	72	68	73

Table XXXVI.—Annual death rates per 1,000 living, by quarters in each year 1931 to 1953, with ratios to each yearly rate taken as 100

Year	Death rate per 1,000 living				Ratio to yearly rate taken as 100			
	March	June	September	December	March	June	September	December
1931	16.5	11.5	9.6	11.7	134	93	78	95
1932	15.4	11.6	9.7	11.5	128	97	81	96
1933	17.1	10.8	9.4	12.0	139	88	76	98
1934	14.6	11.8	9.6	11.2	124	100	81	95
1935	13.2	12.0	9.8	12.0	113	103	84	103
1936	15.1	11.8	9.7	12.0	125	98	80	99
1937	16.2	11.6	9.7	12.3	131	94	78	99
1938	13.6	11.6	9.9	11.5	117	100	85	99
1939	15.1	11.7	9.9	11.8	125	97	82	98
1940	20.6	11.9	10.8	14.1	143	83	75	98
1941	18.4	14.2	10.1	11.5	136	105	75	85
1942	15.8	12.0	9.8	11.6	128	98	80	94
1943	14.5	11.7	10.1	15.7	112	90	78	121
1944	15.3	12.0	11.0	12.7	120	94	87	100
1945	16.5	11.5	10.0	12.6	131	91	79	100
1946	15.4	11.2	9.7	11.9	128	93	81	99
1947	17.6	11.3	9.2	11.4	143	92	75	93
1948	12.4	10.3	9.4	11.7	113	94	85	106
1949	15.2	11.2	9.3	11.8	129	95	79	100
1950	14.0	11.1	9.3	12.3	120	95	80	106
1951	19.1	11.1	9.1	11.0	153	89	73	88
1952	13.4	10.6	8.9	12.4	119	94	79	110
1953	15.8	10.4	8.9	10.7	139	91	78	94

Table XXXVII.—Average annual death rates per 1,000 living by sex and age, 1841 to 1953

	Males								Females							
	All ages	0-	5-	15-	25-	45-	65-	85 and over	All ages	0-	5-	15-	25-	45-	65-	85 and over
1841-1850 ..	23.1	71.3	7.24	8.23	11.2	23.6	89.6	312.3	21.6	61.2	7.27	8.50	11.6	21.1	82.4	293.2
1851-1860 ..	23.1	72.7	6.79	7.71	10.9	23.2	86.8	308.3	21.4	63.0	6.84	7.98	10.9	20.1	80.0	289.0
1861-1870 ..	23.7	73.5	6.43	7.26	11.5	24.8	87.7	315.0	21.4	63.7	6.25	7.30	10.7	20.6	79.8	285.0
1871-1880 ..	22.7	68.4	5.29	6.24	11.3	26.1	90.2	327.4	20.1	58.3	5.05	6.12	9.92	21.0	80.9	296.4
1881-1890 ..	20.3	61.6	4.20	4.97	9.79	25.5	89.4	306.0	18.1	51.9	4.23	4.97	8.76	20.6	78.9	271.0
1891-1900 ..	19.3	62.7	3.40	4.38	8.82	25.2	89.4	286.7	17.1	52.8	3.49	4.06	7.58	20.3	79.5	261.3
1901-1905 ..	17.1	54.7	2.93	3.77	7.59	23.0	83.4	274.6	15.0	45.8	3.03	3.34	6.34	18.1	72.5	249.4
1906-1910 ..	15.6	45.4	2.67	3.45	6.76	21.7	82.0	283.0	13.8	38.0	2.78	3.05	5.60	16.9	70.8	250.9
1911-1915 ..	15.5	40.9	2.75	3.69	6.76	21.0	81.7	281.6	13.3	34.0	2.75	3.00	5.17	16.0	69.5	245.4
1916-1920 ..	14.9	34.4	3.11	4.85	7.61	19.5	81.1	267.8	12.8	28.4	3.18	4.06	5.91	14.4	65.9	241.9
1921-1925 ..	12.9	27.0	2.10	3.06	5.24	16.9	76.2	272.7	11.4	21.8	2.05	2.83	4.26	12.8	64.0	241.2
1926-1930 ..	12.9	23.1	2.06	2.93	4.84	17.0	76.3	298.1	11.4	18.5	1.90	2.67	3.97	12.4	62.5	254.4
1931-1935 ..	12.7	20.1	1.84	2.81	4.23	16.6	75.1	278.9	11.4	16.0	1.71	2.51	3.67	11.9	61.0	245.0
1936-1940 ..	13.3	17.5	1.60	2.64	3.95	17.3	76.2	286.9	11.6	13.7	1.40	2.17	3.22	11.5	60.1	253.0
1941-1945 ..	12.8	15.5	1.44	2.99	3.72	15.7	69.0	227.0	10.9	12.3	1.13	1.98	2.84	9.86	52.6	207.0
1946-1950 ..	12.2	10.5	0.79	1.42	2.58	14.5	69.9	241.6	10.9	8.14	0.59	1.29	2.17	8.79	52.1	208.9
1951 ..	13.4	7.35	0.61	1.13	2.30	15.1	80.9	307.8	11.8	5.68	0.41	0.77	1.82	8.79	57.7	249.1
1952 ..	12.2	7.02	0.54	1.12	2.10	13.8	72.9	265.1	10.5	5.45	0.38	0.64	1.60	8.04	50.2	212.3
1953 ..	12.2	7.06	0.52	1.00	1.98	13.7	73.9	258.1	10.7	5.62	0.38	0.57	1.59	7.87	50.7	218.8

Table XXXVIII.—Death rates by Sex from Certain Causes at Different Periods of Life, England and Wales, 1953

(Classified in accordance with the International Abbreviated List with certain sub-divisions)

Abbreviated List Nos.	Cause of Death		All ages	0-4 weeks	4 weeks to 1 year	1-	5-	15-	25-	45-	65-	75 and over
			Rates per million living	Rates per 1,000 Related live births		Rates per million living						
	Estimated mid-year population (in thousands)	M F	21,206 22,903	352,037* 332,335*		1,392 1,327	3,315 3,176	2,783 2,827	6,336 6,482	5,083 5,797	1,376 1,927	629 1,043
	ALL CAUSES	M F	12,237 10,655	19.89 15.31	9.96 8.33	1,262 1,090	515 383	1,004 570	1,981 1,587	13,679 7,867	53,733 32,148	137,959 109,385
B1	Tuberculosis of respiratory system	M F	257 108	0.01 —	0.03 0.03	7 14	4 4	45 78	185 160	535 122	814 162	445 140
B2	Tuberculosis, other forms	M F	24 21	— 0.00	0.05 0.06	60 64	14 12	17 18	18 12	29 21	31 22	33 40
B3	Syphilis and its sequelae	M F	47 19	0.01 —	0.01 —	— —	— —	1 1	7 4	86 26	262 73	235 120
B4	Typhoid fever	M F	0 0	— —	— —	— —	— —	— —	— 0	— 0	1 —	— —
B5	Cholera	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
B6	Dysentery, all forms	M F	1 1	0.00 —	0.01 0.00	1 1	0 0	— 0	0 0	0 1	3 2	3 5
B7	Scarlet fever and streptococcal sore throat	M F	1 2	— —	0.00 0.01	3 3	0 1	— 1	1 1	2 2	1 2	5 2
B8	Diphtheria	M F	1 1	— —	— —	4 4	1 1	— —	— 0	0 0	— —	— —
B9	Whooping cough	M F	5 6	— 0.01	0.20 0.28	23 30	1 —	— —	— 0	— 0	— —	— —
B10	Meningococcal infections	M F	8 5	0.00 0.01	0.21 0.14	41 35	4 3	1 1	1 1	2 1	1 3	3 2
B11	Plague	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
B12	Acute poliomyelitis	M F	9 5	0.01 —	0.01 0.00	16 12	17 11	12 8	11 6	2 1	2 —	— —
B13	Smallpox	M F	0 0	— —	— —	— —	0 —	1 —	— 0	0 0	— —	— —
B14	Measles	M F	7 4	— 0.00	0.09 0.07	54 33	8 10	1 0	0 0	1 0	1 —	— —
B15	Typhus and other rickettsial diseases	M F	— 0	— —	— —	— —	— —	— 0	— —	— —	— —	— —
B16	Malaria	M F	0 —	— —	— —	— —	— —	— 0	— 0	— 0	— —	— —
B17	All other diseases classified as infective and parasitic	M F	27 24	0.02 0.01	0.13 0.11	27 27	10 7	11 9	17 17	34 23	54 44	89 98
B18	Malignant neoplasms (140-205)	M F	2,166 1,833	0.00 0.02	0.05 0.07	114 108	68 55	104 59	377 451	3,519 2,607	10,604 6,250	16,512 10,924
	Malignant neoplasm of stomach (151)	M F	379 271	— —	— —	— —	— —	1 1	53 32	602 272	2,044 1,069	2,921 2,263
	Malignant neoplasm of trachea, bronchus and lung (162, 163)	M F	607 98	— —	— —	— —	— 0	4 1	99 26	1,437 165	2,768 361	1,800 410
	Malignant neoplasm of breast (170)	M F	4 356	— —	— —	— —	— —	— 0	1 127	8 616	15 1,073	19 1,623
	Malignant neoplasm of uterus (171-174)	M F	172 —	— —	— —	1 —	— —	2 —	60 319	319 525	525 661	661 —
	Leukæmia and aleukæmia (204)	M F	53 44	0.00 0.00	0.02 0.04	61 51	30 23	24 13	26 23	72 53	148 130	197 105
	Other malignant and lymphatic neoplasms (Remainder of 140-205)	M F	1,123 892	— 0.02	0.03 0.04	52 56	38 31	76 43	198 183	1,401 1,136	5,629 3,091	11,576 5,862
	Benign and unspecified neoplasms	M F	40 40	0.02 0.01	0.02 0.01	11 11	11 11	9 7	19 24	72 71	114 78	157 118
B20	Diabetes mellitus	M F	50 93	— —	0.00 —	4 3	2 4	5 9	10 10	50 77	248 420	603 732
B21	Anæmias	M F	27 45	— —	0.01 0.01	4 5	2 3	3 3	2 5	24 34	140 162	364 438
B22	Vascular lesions affecting central nervous system	M F	1,356 1,716	0.00 0.00	0.03 0.02	6 5	3 5	18 18	79 80	1,127 1,117	6,919 6,070	20,568 19,690
B23	Nonmeningococcal meningitis	M F	11 8	0.07 0.07	0.17 0.17	23 11	4 2	2 1	2 2	11 7	16 8	13 15
B24	Rheumatic fever	M F	7 7	— —	0.00 —	4 2	10 19	7 10	5 6	6 4	12 4	6 7
B25	Chronic rheumatic heart disease	M F	157 240	— —	— —	— —	7 5	30 32	96 155	270 368	552 625	779 1,011

* Live birth occurrences

Table XXXVIII—continued

Abbreviated List Nos.	Cause of Death		All ages	4		1-	5-	15-	25-	45-	65-	75 and over
				0-4 weeks	weeks to 1 year							
			Rates per million living	Rates per 1,000 Re- lated live births		Rates per million living						
B26	Arteriosclerotic heart diseases, including cor- onary disease (420)	M	1,837	0-00	—	—	—	2	167	2,712	10,073	16,305
		F	995	0-00	—	—	0	0	22	731	4,408	9,497
		M	1,381	—	0-01	1	2	5	24	500	5,344	30,539
B27	Degenerative heart disease (421, 422)	F	1,764	—	—	—	2	2	16	359	4,067	29,109
		M	169	0-01	0-02	4	2	14	26	167	845	2,146
		F	172	0-01	0-01	2	3	5	17	122	594	1,867
B28	Hypertension with heart disease	M	246	—	—	—	0	—	10	238	1,414	3,176
		F	266	—	—	—	—	1	8	167	1,059	2,893
B29	Hypertension without mention of heart	M	190	—	—	—	0	4	26	221	868	2,432
		F	179	—	—	—	0	4	15	127	634	1,955
B.46 (Pt)	Other circulatory diseases (450-468)	M	326	0-01	0-01	1	1	4	22	171	1,354	6,378
		F	340	—	0-01	—	2	6	19	122	893	4,984
B30	Influenza	M	137	0-01	0-11	14	5	7	20	144	608	1,766
		F	155	0-01	0-09	11	4	7	22	83	430	1,941
B31	Pneumonia	M	504	—	3-31	165	26	23	46	413	2,011	6,351
		F	439	—	2-68	172	25	22	39	209	1,147	4,923
B32	Bronchitis	M	920	0-07	0-63	42	6	5	42	1,118	5,007	10,062
		F	475	0-05	0-50	45	5	6	24	248	1,501	5,875
B46 (Pt)	Other diseases of respir- atory system (470-475, 510-527)	M	155	0-05	0-11	27	10	12	33	266	683	983
		F	63	0-02	0-10	20	11	10	19	54	160	553
B33	Ulcer of stomach and duodenum	M	179	—	—	1	—	2	37	300	850	1,359
		F	58	0-01	0-00	1	—	1	8	54	213	528
B34	Appendicitis	M	26	—	0-00	25	14	11	11	32	76	151
		F	16	—	0-00	9	11	8	4	14	43	87
B35	Intestinal obstruction and hernia	M	70	0-22	0-20	16	4	3	10	69	291	758
		F	66	0-13	0-07	8	1	2	9	57	234	556
B36	Gastritis, enteritis and diarrhoea except diarr- hoea of newborn	M	50	0-01	1-04	32	3	7	11	42	121	253
		F	58	0-00	0-76	24	4	10	17	38	146	377
B37	Cirrhosis of liver	M	31	0-01	0-01	1	2	1	12	62	124	118
		F	22	—	0-01	1	1	2	6	36	88	70
B38	Nephritis and nephrosis	M	132	—	0-04	11	11	41	66	178	455	1,076
		F	115	—	0-02	8	10	29	45	137	342	721
B39	Hyperplasia of prostate	M	197	—	—	—	—	—	—	57	887	4,231
B40	Complications of pregnancy, childbirth and puerperium	F	23	—	—	—	—	34	64	3	—	—
B41	Congenital malforma- tions	M	104	2-68	1-65	101	29	25	23	33	34	54
		F	89	2-65	1-61	112	23	18	19	27	29	28
B42	Birth injuries, postnatal asphyxia and atelectasis	M	124	7-38	0-14	1	—	—	—	—	—	—
		F	74	5-01	0-09	—	—	—	—	—	—	—
B43	Diarrhoea of newborn (764)	M	2	0-10	—	—	—	—	—	—	—	—
		F	1	0-07	—	—	—	—	—	—	—	—
B44	Other infections of new- born (763, 765-768)	M	28	1-65	0-01	—	—	—	—	—	—	—
		F	17	1-12	0-02	—	—	—	—	—	—	—
B45	Other diseases of early infancy, and immat- urity unqualified	M	121	7-13	0-18	—	—	—	—	—	—	—
		F	86	5-74	0-17	1	0	—	—	—	—	—
B46 (Rem)	Senility without mention of psychosis, ill-defined and unknown causes	M	132	0-02	0-03	4	0	1	2	7	150	4,010
		F	211	0-02	0-04	7	0	1	2	4	129	4,331
BE47	All other diseases (Re- mainder 001-795)	M	393	0-16	0-69	135	47	76	125	498	1,565	3,183
		F	464	0-11	0-60	106	48	65	163	508	1,436	3,023
BE48	Motor vehicle accidents	M	158	—	0-01	112	85	240	137	140	245	518
		F	45	—	0-01	71	41	37	17	40	87	181
BE49	All other accidents	M	273	0-21	0-69	164	99	198	187	264	521	1,804
		F	204	0-18	0-57	118	34	24	34	95	410	2,416
BE50	Suicide and self-inflicted injury	M	142	—	—	—	1	48	107	264	411	480
		F	76	—	—	—	1	16	59	145	171	127
BN47	Homicide and operations of war	M	8	0-03	0-01	4	2	5	7	12	21	8
		F	4	0-03	0-01	8	3	3	4	4	3	3
BN48	Fractures, head injuries and internal injuries	M	308	0-01	0-06	134	106	338	249	307	563	1,798
		F	169	0-02	0-03	91	47	46	28	81	316	2,114
BN49	Burns	M	14	—	0-02	32	4	7	8	10	23	113
		F	17	—	0-02	34	10	2	2	10	43	140
BN50	Effects of poisons	M	102	—	0-01	22	4	30	77	182	260	402
		F	79	—	0-01	18	5	16	53	132	181	247
BN50	All other injuries	M	158	0-23	0-63	91	72	115	104	182	352	498
		F	64	0-20	0-52	54	19	15	31	62	131	225

Table XXXIX.—Death rates per 100,000 living from various causes at ages 45-74 and rates per cent of all causes in four regional groups, England and Wales, 1953—Males

	Rate per 100,000 living at ages 45-74								Rate per cent of all causes									
	All Causes	Tuberculosis	Cancer	Cancer of Lung	Other Cancer	Vascular lesions of C.N.S.	Cardio-vascular diseases	Respiratory diseases	All other Causes	All Causes	Tuberculosis	Cancer	Cancer of Lung	Other Cancer	Vascular lesions of C.N.S.	Cardio-vascular diseases	Respiratory diseases	All other Causes
ENGLAND AND WALES	2,221	62	503	172	331	236	739	330	351	100	3	23	8	15	11	33	15	16
Conurbations	2,305	72	547	210	337	221	732	392	341	100	3	24	9	15	10	32	17	15
Areas outside Conurbations																		
Urban areas with populations of 100,000 and over	2,320	73	528	185	344	243	765	353	357	100	3	23	8	15	10	33	15	15
Urban areas with populations of 50,000 and under 100,000	2,218	60	498	166	332	246	756	301	357	100	3	22	7	15	11	34	14	16
Urban areas with populations under 50,000	2,241	55	484	147	337	264	775	300	363	100	2	22	7	15	12	35	13	16
Rural Districts	1,916	44	409	116	293	220	672	229	341	100	2	21	6	15	11	35	12	18
NORTH OF ENGLAND																		
(Northern, E. and W. Ridings, North Western)	2,377	63	518	174	344	277	813	343	363	100	3	22	7	14	12	34	14	15
Conurbations																		
Tyneside	2,418	77	589	200	389	293	785	324	350	100	3	24	8	16	12	32	13	14
West Yorkshire	2,492	61	522	177	346	313	845	389	362	100	2	21	7	14	13	34	16	15
South East Lancashire	2,559	72	551	199	352	274	839	451	373	100	3	22	8	14	11	33	18	15
Merseyside	2,401	96	595	245	349	234	803	348	325	100	4	25	10	15	10	33	14	14
Areas outside Conurbations																		
Urban areas with populations of 100,000 and over	2,384	66	544	195	349	261	797	355	360	100	3	23	8	15	11	33	15	15
Urban areas with populations of 50,000 and under 100,000	2,367	59	521	161	360	284	822	321	360	100	2	22	7	15	12	35	14	15
Urban areas with populations under 50,000	2,337	52	485	144	342	294	832	298	376	100	2	21	6	15	13	36	13	16
Rural Districts	2,037	43	405	111	294	256	742	228	364	100	2	20	5	14	13	23	11	18

Table XXXIX.—continued

	Rate per 100,000 living at ages 45-74								Rate per cent of all causes									
	All Causes	Tuberculosis	Cancer	Cancer of Lung	Other Cancer	Vascular lesions of C.N.S.	Cardio-vascular diseases	Respiratory diseases	All other Causes	All Causes	Tuberculosis	Cancer	Cancer of Lung	Other Cancer	Vascular lesions of C.N.S.	Cardio-vascular diseases	Respiratory diseases	All other Causes
MIDLANDS AND EASTERN REGIONS . . (North Midland, Midland, Eastern) Conurbation	2,051	60	459	152	307	226	669	302	335	100	3	22	7	15	11	33	15	16
West Midlands	2,269	89	526	202	324	229	674	407	344	100	4	23	9	14	10	30	18	15
Areas outside Conurbation																		
Urban areas with populations of 100,000 and over	2,178	79	499	172	326	232	675	361	332	100	4	23	8	15	11	31	17	15
Urban areas with populations of 50,000 and under 100,000	2,023	55	449	157	292	206	693	284	336	100	3	22	8	14	10	34	14	17
Urban areas with populations under 50,000	2,169	53	470	141	330	256	737	296	356	100	2	22	7	15	12	34	14	16
Rural Districts	1,732	36	381	112	269	200	595	208	312	100	2	22	6	16	12	34	12	18
SOUTH OF ENGLAND (London and South Eastern, Southern, South Western)	2,148	59	514	186	328	201	705	328	328	100	3	24	9	15	9	33	15	15
Greater London	2,173	66	546	218	328	174	674	386	342	100	3	25	10	15	8	31	18	16
Urban areas with populations of 100,000 and over	2,326	67	543	184	359	231	795	327	362	100	3	23	8	15	10	34	14	16
Urban areas with populations of 50,000 and under 100,000	2,204	63	509	174	336	239	749	279	364	100	3	23	8	15	11	34	13	17
Urban areas with populations under 50,000	2,139	48	484	155	330	240	739	271	356	100	2	23	7	15	11	35	13	17
Rural Districts	1,965	43	438	129	309	211	694	234	345	100	2	22	7	16	11	35	12	18
WALES (including Monmouthshire)	2,385	84	495	147	348	261	805	359	383	100	4	21	6	15	11	34	15	16
Urban areas with populations of 100,000 and over	2,575	89	542	194	348	260	886	387	411	100	3	21	8	14	10	34	15	16
Urban area with population of 50,000 and under 100,000	3,222	86	741	284	457	370	765	691	568	100	3	23	9	14	11	24	21	18
Urban areas with populations under 50,000	2,419	82	512	149	363	269	816	380	361	100	3	21	6	15	11	34	16	15
Rural Districts	2,142	82	419	101	318	241	731	289	380	100	4	20	5	15	11	34	13	18

Table XL.—Death rates per 100,000 living from various causes at ages 45-74, and rates per cent of all causes in four regional groups, England and Wales, 1953—Females

	Rate per 100,000 living at ages 45-74						Rate per cent of all causes							
	All Causes	Tuberculosis	Cancer	Vascular lesions of C.N.S.	Cardio-vascular diseases	Respiratory diseases	All other Causes	All Causes	Tuberculosis	Cancer	Vascular lesions of C.N.S.	Cardio-vascular diseases	Respiratory diseases	All other Causes
ENGLAND AND WALES	1,392	15	351	235	413	125	252	100	1	25	17	30	9	18
Conurbations	1,391	15	363	215	397	149	251	100	1	26	15	29	11	18
Areas outside Conurbations	1,423	18	354	236	420	133	263	100	1	25	17	30	9	18
Urban areas with populations of 100,000 and over	1,373	16	345	246	409	109	248	100	1	25	18	30	8	18
Urban areas with populations of 50,000 and under	1,451	15	357	267	443	108	261	100	1	25	18	31	7	18
Urban areas with populations under 50,000	1,329	14	325	238	412	99	241	100	1	24	18	31	7	18
Rural Districts	1,522	16	361	263	481	133	269	100	1	24	17	32	9	18
NORTH OF ENGLAND														
(Northern, E. and W. Ridings, North Western)														
Conurbations	1,471	19	348	263	455	114	274	100	1	24	18	31	8	19
Tyneside	1,571	12	368	260	498	155	278	100	1	23	17	32	10	18
West Yorkshire	1,626	17	383	278	494	175	280	100	1	24	17	30	11	17
South East Lancashire	1,370	20	365	203	421	121	241	100	1	27	15	31	9	18
Merseyside	1,477	14	350	254	468	133	258	100	1	24	17	32	9	17
Areas outside Conurbations	1,481	15	355	259	471	130	252	100	1	24	17	32	9	17
Urban areas with populations of 100,000 and over	1,561	17	364	282	508	112	279	100	1	23	18	33	7	18
Urban areas with populations of 50,000 and under	1,464	17	331	272	479	97	270	100	1	23	19	33	7	18
Urban areas with populations under 50,000	1,359	15	337	239	397	118	252	100	1	25	18	29	9	19
Rural Districts	1,368	17	338	231	388	146	249	100	1	25	17	28	11	18
MIDLANDS AND EASTERN REGIONS														
(North Midland, Midland, Eastern)														
Conurbation	1,403	20	351	228	405	135	265	100	1	25	16	29	10	19
West Midlands	1,292	14	328	235	374	98	243	100	1	25	18	29	8	19
Areas outside Conurbation	1,407	13	343	265	415	113	258	100	1	24	19	29	8	18
Urban areas with populations of 100,000 and over	1,296	14	324	229	388	99	242	100	1	25	18	30	8	19
Urban areas with populations of 50,000 and under	1,302	14	353	204	366	129	236	100	1	27	16	28	10	18
Urban areas with populations under 50,000	1,281	14	364	180	339	147	235	100	1	28	14	26	11	18
Rural Districts	1,383	17	368	217	388	143	250	100	1	27	16	28	10	18
SOUTH OF ENGLAND														
(London and South Eastern, Southern, South Western)														
Greater London	1,335	18	346	244	381	102	243	100	1	26	18	29	8	18
Urban areas with populations of 100,000 and over	1,363	14	357	243	400	109	240	100	1	26	18	29	8	18
Urban areas with populations of 50,000 and under	1,244	9	314	210	391	102	217	100	1	25	17	31	8	17
Urban areas with populations under 50,000	1,501	20	364	290	448	92	287	100	1	24	19	30	6	19
Rural Districts	1,444	22	346	254	416	100	307	100	2	24	18	29	7	21
WALES (including Monmouthshire)														
Urban areas with populations of 100,000 and over	1,648	19	463	241	463	102	361	100	1	28	15	28	6	22
Urban areas with population of 50,000 and under	1,527	18	372	301	470	85	282	100	1	24	20	31	6	18
Urban areas with populations under 50,000	1,491	23	356	306	440	96	270	100	2	24	21	30	6	18
Rural Districts														

Table XLI.—Deaths by cause and sex, according to type of institution in which they occurred, England and Wales, 1953

International Classn. No.	Cause of Death	Males					Females				
		*General Hospitals National Health Service	*General Hospitals other than National Health Service	Mental Hospitals and Mental Deficiency Hospitals	Nursing Homes	Other Institutions at Home and Elsewhere	*General Hospitals other than National Health Service	Mental Hospitals and Mental Deficiency Hospitals	Nursing Homes	Other Institutions at Home and Elsewhere	
001-008 010	Tuberculosis, respiratory system	2,218	75	186	9	2,959	995	24	121	5	1,321
011-019	Tuberculosis of meninges and central nervous system	168	5	1	—	3	162	—	—	—	6
020-029	Tuberculosis, other	227	10	12	1	90	200	3	6	3	92
040	Syphilitic disease	423	8	88	5	477	154	2	30	4	254
043	Typhoid fever	1	—	—	—	—	2	—	—	—	—
045-048	Cholera	—	—	—	—	—	—	—	—	—	—
050	Dysentery, all forms	13	—	4	—	2	9	—	6	—	2
051	Scarlet fever	1	—	—	—	7	2	—	—	1	16
052, 053	Streptococcal sore throat	7	—	—	—	8	9	—	—	—	10
055	Erysipelas, septicaemia, pyæmia	58	3	1	1	14	51	—	2	—	12
056	Diphtheria	9	—	—	—	2	9	—	—	—	3
057	Whooping cough	77	—	—	—	27	115	—	—	—	24
058	Meningococcal infections	126	1	2	—	37	98	2	1	—	24
080	Plague	—	—	—	—	—	—	—	—	—	—
082	Acute poliomyelitis	184	4	—	—	11	109	—	1	—	11
084	Acute infectious encephalitis	55	3	1	—	11	52	1	3	—	8
085	Smallpox	6	—	—	—	—	2	—	—	—	—
085	Measles	74	—	9	—	59	63	—	5	—	35
092	Infectious hepatitis	88	2	1	2	33	122	—	4	3	33
100-108	Typhus and other rickettsial diseases	—	2	—	—	—	1	—	—	—	—
110-117	Malaria	2	—	—	—	—	—	—	—	—	—
030-039, 041, 042, 044, 049, 054, 059-074, 081, 083, 086-091, 093-096, 120-138	All other diseases classified as infective and parasitic	177	1	20	3	89	131	—	25	5	103
140-205	Malignant neoplasms.	20,504	513	417	586	23,915	16,114	356	509	1,470	23,540
140-148	Mouth and pharynx	547	25	12	22	796	216	6	6	21	319
150	Esophagus	684	12	28	12	599	381	4	29	20	431
151	Stomach	3,048	99	86	78	4,733	1,943	44	67	158	3,997
152-154	Intestine and rectum	3,410	62	48	108	3,892	3,074	55	80	352	4,523
161	Larynx	331	8	6	9	383	54	—	3	5	106
162, 163	Lung, bronchus	5,423	156	110	123	7,069	988	17	29	75	1,142
170	Breast	16	1	—	1	63	2,418	88	92	346	5,214
171	Cervix uteri	—	—	—	—	—	977	29	26	51	1,418
171-174	Uterus	—	—	—	—	—	1,476	39	52	102	2,276
200	Lymphosarcoma, reticulosarcoma	261	5	6	5	177	166	—	6	8	121
201	Hodgkin's disease	257	7	7	5	212	142	1	5	8	131
204	Leukæmia, aleukæmia	719	12	4	14	367	671	3	12	14	305
155-160, 164, 165, 175-199, 202, 203, 205, 210-239	Other malignant and lymphatic neoplasms	5,808	126	110	209	5,624	4,585	99	128	361	4,975
252	Benign and unspecified neoplasms	531	7	21	9	270	621	11	30	22	234
260	Thyrototoxicosis	29	1	—	—	35	116	1	6	6	188
290-293	Diabetes	554	10	10	8	484	1,042	7	45	44	990
330-334	Anæmias	278	10	16	4	272	461	3	13	26	521
	Vascular lesions of nervous system	10,367	99	445	581	17,270	12,231	130	59.3	1,640	24,713

* All hospitals and institutions for the care of the sick excluding mental and mental deficiency hospitals and nursing homes.

TABLE XLI.—continued

International Classn. No.	Cause of Death	Males					Females				
		*General Hospitals National Health Service	*General Hospitals other than National Health Service	Mental Hospitals and Mental Deficiency Hospitals	Nursing Homes	Other Institutions at Home and Elsewhere	*General Hospitals National Health Service	*General Hospitals other than National Health Service	Mental Hospitals and Mental Deficiency Hospitals	Nursing Homes	Other Institutions at Home and Elsewhere
340	Non-meningococcal meningitis ..	195	4	2	—	29	168	1	2	13	
391-393	Otitis media and mastoiditis ..	180	2	7	—	33	84	—	4	22	
400-402	Rheumatic fever ..	100	1	3	—	39	112	—	2	52	
410-416	Chronic rheumatic heart disease ..	1,283	24	60	22	1,945	2,179	18	118	3,104	
420	Coronary disease, angina ..	9,015	151	425	274	29,101	4,789	64	495	17,004	
420-422	Arteriosclerotic and degenerative heart disease ..	14,421	246	2,159	800	50,625	10,965	176	3,358	46,544	
440-443	Hypertension with heart disease ..	1,934	23	174	58	3,027	1,849	26	208	3,813	
444-447	Hypertension without mention of heart ..	1,852	26	82	55	2,006	1,475	24	121	2,359	
430-434	Other diseases of heart ..	1,725	23	43	33	1,764	1,569	21	123	2,209	
444-468	Other circulatory disease ..	4,900	53	264	135	5,572	4,440	52	445	6,577	
480-483	Influenza ..	367	5	55	44	2,434	395	6	112	2,920	
490-493, 763	Pneumonia ..	6,333	40	556	97	4,226	5,127	47	821	4,176	
500-502	Bronchitis ..	5,269	58	186	124	13,865	2,101	20	150	8,415	
470-475, 510-527	Other diseases of respiratory system ..	1,396	21	87	14	1,765	593	6	43	774	
540-541	Ulcer of stomach and duodenum ..	3,129	26	30	30	580	960	6	21	315	
543, 571, 572	Gastritis, enteritis and diarrhoea except of newborn ..	736	12	8	5	296	829	5	22	457	
550-553	Appendicitis ..	505	7	5	10	23	308	1	4	28	
560, 561, 570	Intestinal obstruction and hernia ..	1,253	5	30	18	178	1,208	10	26	240	
581	Cirrhosis of liver ..	444	4	9	11	182	338	3	9	148	
584, 585	Cholelithiasis, cholecystitis ..	350	2	6	11	76	707	11	14	285	
590-594	Nephritis and nephrosis ..	1,348	31	47	45	1,331	1,099	9	65	1,392	
610	Hyperplasia of prostate ..	3,059	34	39	88	953	—	—	—	—	
640-689	Pregnancy, childbirth, abortion ..	—	—	—	—	—	412	1	5	104	
640, 641, 681, 682, 684	Maternal sepsis (not abortion) ..	—	—	—	—	—	44	1	1	23	
642, 685, 686	Toxæmias of pregnancy and puerperium ..	—	—	—	—	—	145	—	2	18	
650-652	Abortion ..	—	—	—	—	—	44	—	2	32	
750-759	Congenital malformations ..	1,670	15	35	32	464	1,428	25	24	543	
760, 761	Birth injury ..	973	9	—	17	148	566	8	25	103	
762	Postnatal asphyxia and atelectasis ..	1,287	21	—	22	163	844	10	22	122	
763	Pneumonia of newborn ..	478	5	—	5	66	274	5	3	54	
764	Diarrhoea of newborn ..	27	—	—	—	9	19	—	—	5	
765-768	Ophthalmia, pemphigus, sepsis of newborn ..	30	—	—	—	2	40	—	1	1	
770	Hæmolytic disease of newborn ..	205	2	—	3	15	165	3	2	15	
774, 776	Immaturity (without other diseases peculiar to early infancy) ..	1,727	25	—	18	229	1,352	21	10	164	
769, 771-773, 775	Other diseases peculiar to early infancy, and immaturity unqualified ..	283	1	—	3	60	178	2	9	40	
794	Senility without psychosis ..	650	10	73	35	1,899	1,011	19	171	3,368	
780-793, 795	Senility without mention of psychosis, ill-defined and unknown causes ..	42	1	1	—	93	51	—	—	76	
Remainder	All other diseases ..	3,865	73	360	116	3,189	4,471	41	271	3,850	
E810-E835	Motor vehicle accidents ..	2,191	18	8	—	1,125	693	5	1	330	
E800-802, 840-962	All other accidents ..	2,485	28	69	19	3,192	2,749	10	72	1,705	
E963, 970-979	Suicide ..	500	8	27	—	2,485	348	5	4	1,359	
E964, 965, 980-999	Homicide and operations of war ..	38	12	1	—	127	13	—	—	86	
	All causes ..	101,077	1,598	5,578	3,019	148,218	82,243	1,108	7,469	145,495	

* All hospitals and institutions for the care of the sick excluding mental and mental deficiency hospitals and nursing homes.

INFANT MORTALITY AND STILLBIRTH

Attention was drawn last year to the marked contrast in recent years between the trend of the stillbirth and early neonatal mortality and the trend of infant deaths at one week and over. Whereas the death rate for infants of one week and more fell by 34 per cent from 1948 to 1952, the perinatal mortality (stillbirths and deaths under one week per 1,000 total births) over the same period declined by under 3 per cent. In 1953, the perinatal rate was 36·9 compared with 37·5 in 1952—an improvement of 1·6 per cent. But among infants aged one week and over the death rate was 11·7 per 1,000 total births compared with 12·1, the percentage reduction being only 3·3, which is less than might have been expected from the trend in recent years.

Mortality among infants aged one week to one year in 1953

In the country as a whole, mortality among infants at ages 1 week-3 months was 7 per cent lower than in 1952, but the rate for infants at 3-6 months remained unchanged and the rate at 6 months-1 year rose very slightly from 2·6 per 1,000 related live births to 2·7. (Table XLVI, page 81.)

Areas in the South of England experienced a definite increase in mortality at ages 3 months-1 year (Table XLVII, page 82), the causes mainly responsible for the excess mortality being (1) gastro-enteritis, (2) respiratory and middle ear infections, (3) whooping cough and measles (Table XLVIII, page 84). Whooping cough and measles also caused more deaths than in 1952 in Wales, and in the Midlands and East of England. Mortality from meningococcal infections other than tuberculous was slightly higher in all parts of England and Wales except the South.

The increased rates from these causes, with the possible exception of the meningitis group, followed the more widespread prevalence of measles and whooping cough during 1953 as compared with 1952. They do not disturb the general trend of mortality from postnatal causes.

This trend is shown for each of the standard regions of England and Wales in Table L (page 87) which exhibits the rates of post-neonatal mortality in successive years from 1949. The familiar mortality gradient between the North and the South, which was well-defined in 1949 (17·8 per 1,000 related live births as compared with 8·8), is substantially less: the rate in the North has declined by 40 per cent to 10·6 as against a decline of less than 13 per cent to 7·7 in the South. The rates in the North Western region (principally Lancashire and Cheshire) have improved the most; they have fallen over the five years, without interruption, from 18·1 to 10·0—a decline of 45 per cent. Elsewhere in England, rates in the Midland region have also shown a relatively greater improvement than others.

Mortality in the perinatal period

The combination of stillbirths and deaths in the first week brings together the majority of foetal and infant deaths due to prenatal and natal causes.

Stillbirths which occur *during* labour are not distinguished from those which occurred before the onset of labour, but it is possible to distinguish deaths within 24 hours of birth from those during the remainder of the first week.

The following table shows the rates from 1950 to 1953 per 1,000 total births, for stillbirths, deaths under 1 day, and deaths at 1-6 days, and gives the percentage by which each has changed between 1950-51 and 1952-53 :—

	1950	1951	1952	1953	1950-51	1952-53	Percentage change
Stillbirths	22·6	23·0	22·7	22·4	22·8	22·5	—1·3
Deaths under 1 week	14·9	15·1	14·8	14·5	15·0	14·6	—2·7
Deaths under 1 day	7·0	7·3	7·4	7·3	7·2	7·3	+1·4
Deaths at 1-6 days	7·8	7·8	7·4	7·2	7·8	7·3	—6·4
Stillbirths plus deaths under 1 day	29·6	30·4	30·1	29·7	30·0	29·9	—0·3
Stillbirths plus deaths under 1 week	37·4	38·2	37·5	36·9	37·8	37·2	—1·6

The stillbirth rate declined, but only by about 1 per cent, and mortality among liveborn infants within the first 24 hours increased by just over 1 per cent. At 1-6 days, however, the death rate fell by 6 per cent. Table LI (page 88) shows the perinatal mortality, and mortality at 1 week-1 year, per 1,000 total live and stillbirths in individual county boroughs and administrative counties during 1952-53.

Early Neonatal Mortality by Cause

The slight increase in the death rate under one day between 1950-51 and 1952-53 (7·36 per 1,000 live births to 7·49) can be accounted for by a rise from 0·67 to 0·80 in mortality attributable to congenital malformations and certain other conditions which, though not classified with the malformations, are almost always congenital in origin when present at birth. These conditions comprise hernias (I.S.C. Nos. 560-561), neoplasms (I.S.C. Nos. 140-239) mongolism and other mental defects (I.S.C. Nos. 320-326). In 1953, the total mortality attributable to these and the malformations taken together amounted to 10 per cent of the deaths under one day, and 13 per cent of the deaths under one week. It is not possible to distinguish deaths in this group according to whether there was or was not mention of immaturity.

Mortality under one day excluding the above congenital anomalies was practically the same in each of the two periods—for immaturity and causes with mention of immaturity 4·62 and 4·61 per 1,000 live births and for all other causes 2·08 and 2·08.

The death rate at 1-6 days from congenital anomalies did not rise—it was 1·23 in 1950-51 and 1·15 in 1952-53. Excluding congenital anomalies, the rate at 1-6 days declined from 6·76 to 6·32 between the two periods.

Neonatal mortality by birth weight

Neither the weight at birth nor the gestation age are among the items required from informants at birth registration.

Analyses elsewhere of neonatal mortality by birth weight show that the prospects of survival become progressively less as birth weight decreases, e.g., the deaths in hospital within 28 days among the 30,837 single live born infants delivered and nursed during 1951 in hospitals participating in the In-patient Enquiry. (Transfers to other hospitals and births with weight not stated have been excluded.)*

Weight group (lbs.)	Deaths at 0-28 days per 1,000 live births at each weight	Per cent distribution	
		Live births	Deaths at 0-28 days
Total	18	100	100
Under 5½ lb. ..	160	6·8	65·7
Over 5½ lb. ..	6	93·2	34·3
2½ lb and under ..	814	0·4	18·7
-3 lb.	549	0·3	8·8
-3½ lb.	414	0·4	10·3
-4 lb.	269	0·5	8·2
-4½ lb.	119	0·9	6·0
-5 lb.	83	1·5	7·6
-5½ lb.	35	2·9	6·0
-6 lb.	12	6·1	4·5
-7½ lb.	6	46·2	17·7
-8 lb.	5	16·3	4·9
-9 lb.	4	18·7	4·7
-10 lb.	3	4·8	1·0
Over 10 lb. ..	27	1·0	1·6

It is clear from this table that neonatal mortality as a whole will vary from one year to the next according to (a) improvement or otherwise in the mortality rates in individual weight categories, and (b) changes in the relative proportions of infants born at different weights, particularly in the proportion 2½ lbs. or under. (It is desirable, however, to choose 2¼ lbs. or under, which is equivalent to 1,000 grammes, as the lower weight limit in routine tabulation: it was not possible to do so in this instance.) Comparison of the percentage distributions of births and deaths also reveals the considerable 'weight' which is given to these very immature deaths. Less than half of one per cent of the live births weighed 2½ lbs. or less, but they contributed 19 per cent of the neonatal mortality. Slight but progressive improvements in the survival prospects at weights upwards of 2½ lbs. brought about by better obstetric and pædiatric care at and after birth might be minimised or even hidden by relatively small increases in the proportion of live births at 2½ lbs. or under.

* Registrar General's Statistical Review of England and Wales, 1950-51, Supplement on Hospital In-patient Statistics (page 13). H.M.S.O., price 7s. 6d. net.

Annual analyses of perinatal mortality—stillbirths and liveborn infants dying within one week—by birth weight would allow these two trends to be studied and assessed separately or together.

Weight at birth, which is more easily and more reliably obtained than gestation age itself, would provide us with a measure of foetal and early infant development, the lack of which seriously handicaps the analysis of perinatal mortality at the present time.

Definitions of the rates employed

A simple definition of an infant mortality rate is the number of deaths among liveborn infants at ages under 12 months registered in a given year per 1,000 live births registered during the same year.

The number of births registered during the year does not necessarily give the true population at risk. There may be variations in delay between the actual time of birth (or stillbirth) and the time when the birth (or stillbirth) is registered. In the case of live births, some of the infants dying in any year will have been born the previous year and should properly be related to live births occurring at that time ; if the birth rate has changed, this may be different from the number occuring during the year. The Medical Text Volumes for 1940-45 (pages 27-29) and 1946-47 (pages 15-17) discuss an adjustment which takes both these factors into account. Infant mortality rates have been calculated per 1,000 “ related ” live births regularly since 1941. In the same way, stillbirths have been calculated per 1,000 total birth occurrences.

The following table shows the infant mortality rates based on “ registered ” and “ related ” live births respectively for each of the last seven years, and sets out the differences between them. The difference in 1953 was almost negligible, there being relatively little change in the number of births taking place as compared with earlier years.

	1947	1948	1949	1950	1951	1952	1953
(a) Infant mortality per 1,000 “registered” live births	41·6	34·4	32·7	30·1	29·8	27·6	26·9
(b) Infant mortality per 1,000 “related” live births	41·4	33·9	32·4	29·6	29·7	27·6	26·8
Difference (b)–(a)	–0·2	–0·5	–0·3	–0·5	–0·1	0·0	–0·1

The 1940-45 Medical Text shows how to compute “ related ” infant mortality rates by sex, legitimacy and quarters of the year, and for regional areas. The method is more fully described with the aid of worked examples, in a recent comprehensive review*. The necessary data from which the infant mortality rates per 1,000 related live births during 1953 were calculated are given in Table 26 of Part I and Table YY of Part II of the Annual Review.

* Logan, W. P. D. “The measurement of infant mortality”, Population Bulletin of the United Nations, No. 3, October, 1953, page 30.

The rates exhibited in the present series of tables all relate to the calendar year unless otherwise specified, and conform to the following definitions :

Infant Mortality Rate—Deaths among liveborn infants at ages under 1 year per 1,000 related live births.

Neonatal Mortality Rate—Deaths among liveborn infants, under 4 weeks of age per 1,000 related live births.

(a) *Early Neonatal Mortality Rate*—Deaths among liveborn infants under 1 week of age per 1,000 related live births ;

(b) *Late Neonatal Mortality Rate*—Deaths among liveborn infants aged 1 week but under 4 weeks per 1,000 related live births.

Post-neonatal Mortality Rate—Deaths among liveborn infants aged four weeks but under 1 year of age per 1,000 related live births. (“ Post-neonatal ” is preferred as the descriptive adjective for this age period because it is self-explanatory in relation to the well-established term “ neonatal.” The adjective “ postnatal ” is best employed in its literal meaning of “ after birth,” irrespective of the time period.)

Stillbirth Rate (Late Fætal Mortality Rate)—Births at or over 28 weeks gestation which are not liveborn, per 1,000 births (live and still).

Perinatal Mortality Rate—This term has come into use in recent years to describe a combination of stillbirths with early neonatal deaths (deaths under 1 week) per 1,000 total births ; it appears in several of the tables in the present Text with total births (live plus still) as the denominator. Stillbirths combined with all neonatal deaths are also shown.

Table XLII.—Principal Causes of Death Under One Year, arranged in ætiological groups: (a) Age-group distribution per cent of all deaths assigned to each cause; (b) Cause distribution per 1,000 total deaths in each age-group. England and Wales, 1953

Ætiological Group	Cause of Death (and International Classification numbers)	Number of infant deaths (under 1 year)	Age distribution per cent of total infant deaths assigned to each cause				Cause distribution per 1,000 total infant deaths in each age-group			
			Infant mortality (under 1 year)	Neonatal mortality			Infant mortality (under 1 year)	Neonatal mortality		
				Under 4 weeks	Early (under 1 week)	Late (1 week and under 4 weeks)		Under 4 weeks	Early (under 1 week)	Late (1 week and under 4 weeks)
ALL CAUSES	All causes	18,324	100	66	55	11	34	1,000	1,000	1,000
	Congenital malformations (750-759) ..	2,934	100	62	40	22	38	151	117	326
	Total causes mainly of prenatal and natal origin other than congenital malformations	8,847	100	98	92	6	2	718	804	273
Prenatal and Natal Group (including congenital malforma- tions)	Immaturity alone, or primary to dis- eases other than of early infancy (774, 776)	3,546	100	98	92	6	2	287	322	108
	Attributed to maternal toxæmia (769)	144	100	97	91	6	3	12	13	4
	Ill-defined diseases of early infancy (773)	226	100	92	83	9	8	17	18	11
	Postnatal asphyxia and atelectasis (762)	2,490	100	99	94	5	1	204	232	60
	Intracranial and spinal injury at birth (760)	1,504	100	98	91	7	2	122	136	50
	Other birth injury (including maternal antepartum hæmorrhage) (761) ..	332	100	99	97	2	1	27	32	4
	Erythroblastosis (770)	408	100	97	87	10	3	33	35	20
	Hæmorrhagic disease of newborn (771)	197	100	99	83	16	1	16	16	16

	5,629	100	23	11	12	77	307	109	60	364	691
Total causes mainly of postnatal origin											
Gastro-enteritis (including diarrhoea of newborn) (571, 764)	665	100	9	1	8	91	36	5	1	28	97
Pneumonia and bronchitis (490-493, 763; 500-502)	3,370	100	28	13	15	72	184	78	44	248	391
Causes classified as infective (001-138); others mainly infective in origin*	995	100	18	4	14	82	54	13	4	69	131
Whooping cough (056, 085) ..	224	100	2	—	2	98	11	0	—	3	35
Acute upper respiratory infections and influenza (470-475; 480-483)	107	100	12	4	8	88	6	1	0	5	15
Otitis media and mastoiditis; empyema; pleurisy (391-393; 518, 519)	112	100	14	3	11	86	6	1	0	7	15
Septicæmia; skin and subcutaneous tissue infections; sepsis of newborn (053, 690-698, 765-768) ..	120	100	57	16	41	43	7	6	3	25	8
Tuberculosis other than tuberculous meningitis (001-008; 011-019) ..	47	100	8	4	4	92	3	0	0	1	7
Tuberculous meningitis (010) ..	16	100	—	—	—	100	1	—	—	—	3
Meningococcal infections and non-meningococcal meningitis (057; 340)	285	100	19	4	15	81	15	4	1	21	37
Causes classified as infective not specified above (remainder 001-138)	84	100	21	5	16	79	5	1	0	7	11
Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	423	100	12	4	8	88	23	4	2	18	60
Lack of care; neglect (including foundlings); infanticide (E926; E980-E985)	111	100	88	86	2	12	6	9	9	1	2
Other accidental causes (remainder E800-E999)	65	100	8	8	—	92	4	0	0	—	10
Total causes remaining	914	100	29	21	8	71	50	22	19	37	104
Neoplasms (140-239)	72	100	22	18	4	78	4	1	1	2	9
Other remaining causes	842	100	30	22	8	70	46	21	18	35	95

* 340, 391-393, 470-483, 518, 519, 690-698, 765-768.

Table XLIII.—Principal Causes of Death Under One Year and in the Neonatal, Post-neonatal and other Age Periods, by Sex, per 1,000 related live births. England and Wales, 1953

Infant Mortality per 1,000 related live births at various ages												
Ætiological Group	Cause of Death (and International Classification numbers)	Total Infant mortality (under 1 year)	Infant Mortality per 1,000 related live births at various ages									
			Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neo-natal mor-tality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			
							Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year	
ALL CAUSES	All Causes	29·84 23·62	19·89 15·30	16·76 12·72	3·13 2·58	9·96 8·32	8·11 6·71	8·65 6·01	3·79 3·05	3·25 2·80	2·91 2·47	
	Congenital malformations (750-759) ..	4·32 4·26	2·68 2·65	1·71 1·75	0·97 0·90	1·64 1·61	0·61 0·73	1·10 1·03	0·90 0·72	0·40 0·51	0·34 0·38	
	Total causes mainly of prenatal and natal origin other than congenital malformations {M. F.	14·78 10·96	14·50 10·74	13·64 10·05	0·86 0·69	0·28 0·22	7·13 5·70	6·51 4·34	0·20 0·17	0·06 0·02	0·02 0·03	
Prenatal and Natal Group (including congenital malforma-tions)	Immaturity alone, or primary to diseases other than of early infancy (774,776) {M. F.	5·68 4·65	5·56 4·56	5·26 4·24	0·30 0·32	0·12 0·10	3·18 2·58	2·08 1·67	0·11 0·08	0·01 0·01	— —	
	Attributed to maternal toxæmia (769) ..	0·24 0·18	0·24 0·17	0·23 0·16	0·01 0·01	— 0·01	0·11 0·09	0·12 0·07	— 0·01	— 0·00	— —	
	Ill-defined diseases of early infancy (773) {M. F.	0·40 0·24	0·38 0·22	0·34 0·20	0·04 0·02	0·02 0·02	0·16 0·10	0·18 0·10	0·01 0·02	0·01 0·00	— 0·00	
	Postnatal asphyxia and atelectasis (762) {M. F.	4·24 3·00	4·19 2·97	3·99 2·83	0·20 0·14	0·05 0·03	2·01 1·56	1·98 1·26	0·03 0·02	0·02 0·01	— 0·00	
	Intracranial and spinal injury at birth (760) ..	2·71 1·66	2·65 1·64	2·47 1·53	0·18 0·11	0·06 0·02	1·07 0·73	1·39 0·80	0·03 0·02	0·01 —	0·02 0·00	
	Other birth injury (including maternal antepartum hæmorrhage) (761) ..	0·55 0·41	0·55 0·41	0·53 0·40	0·02 0·01	0·00 0·00	0·37 0·32	0·17 0·09	0·00 —	— —	0·00 0·00	
	Erythroblastosis (770) ..	0·64 0·55	0·61 0·54	0·56 0·48	0·05 0·06	0·03 0·01	0·20 0·27	0·36 0·21	0·02 0·01	0·01 0·00	0·00 0·00	
	Hæmorrhagic disease of newborn (771) {M. F.	0·33 0·24	0·33 0·24	0·27 0·20	0·06 0·04	0·00 0·00	0·04 0·05	0·23 0·15	— 0·00	0·00 —	— 0·00	

Postnatal Group	Total causes mainly of postnatal origin ..	{ M. F.	9.21 7.25	2.24 1.60	1.08 0.68	1.16 0.92	6.97 5.65	0.22 0.17	0.86 0.51	2.32 1.94	2.49 1.99	2.16 1.72
Postnatal Group	Gastro-enteritis (including diarrhoea of newborn) (571, 764)	{ M. F.	1.12 0.81	0.10 0.07	0.01 0.01	0.09 0.06	1.02 0.75	— —	0.01 0.01	0.36 0.28	0.36 0.26	0.30 0.20
	Pneumonia and bronchitis (490-493, 763: 500-502)	{ M. F.	5.59 4.25	1.64 1.06	0.82 0.46	0.82 0.60	3.95 3.19	0.06 0.05	0.76 0.41	1.36 1.09	1.48 1.22	1.11 0.88
	Causes classified as infective (001-138): others mainly infective in origin* ..	{ M. F.	1.52 1.39	0.26 0.26	0.07 0.06	0.19 0.20	1.26 1.13	0.00 0.01	0.06 0.05	0.34 0.33	0.39 0.32	0.53 0.48
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	{ M. F.	0.67 0.58	0.07 0.08	0.02 0.03	0.05 0.05	0.60 0.50	0.00 0.00	0.02 0.02	0.23 0.22	0.23 0.17	0.14 0.11
	Lack of care; neglect (including foundlings); infanticide (E926, E980-E985)	{ M. F.	0.19 0.12	0.16 0.12	0.16 0.12	0.00 —	0.03 0.00	0.15 0.11	0.01 0.02	0.01 0.00	0.01 —	0.01 0.00
	Other accidental causes (remainder E800-E999)	{ M. F.	0.10 0.09	0.01 0.01	0.01 0.01	— —	0.09 0.08	0.00 0.00	0.01 0.00	0.01 0.02	0.02 0.02	0.06 0.04
	Total causes remaining	{ M. F.	1.53 1.14	0.47 0.31	0.33 0.24	0.14 0.07	1.06 0.83	0.15 0.11	0.17 0.13	0.37 0.22	0.29 0.27	0.40 0.34
	Immaturity, or with mention of immaturity (774, 776; 760.5-773.5)		9.31	9.17	8.45	0.72	0.14	4.60	3.84	0.13	0.01	0.00
	Immaturity alone, or primary to disease other than of early infancy (774, 776)		5.19	5.08	4.76	0.32	0.11	2.88	1.88	0.10	0.01	—
	Immaturity associated with diseases of early infancy (760.5-773.5)		4.12	4.09	3.68	0.41	0.03	1.72	1.96	0.03	0.00	0.00
	All other causes (760.0-773.0 and remainder)		17.51	8.49	6.35	2.14	9.02	2.83	3.53	3.30	3.02	2.70

* 340, 391-393, 470-483, 518, 519, 690-698, 765-768.

Table XLIV.—Stillbirths per 1,000 Total Births, Infant Deaths and Deaths in the Early Neonatal, Late Neonatal and Post-neonatal Periods per 1,000 Related Live Births, and Death Rates from the Principal Causes of Infant Mortality; Comparison of Annual and Quarterly Rates. England and Wales, 1953

Ætiological Group	Cause of Death (and International Classification numbers)	Annual Rates (per 1,000 related live births)	Quarterly Rates (Per 1,000 live birth occurrences)*				Quarterly Rates per cent of Annual Rates			
			Jan. to March	April to June	July to Sept.	Oct. to Dec.	Jan. to March	April to June	July to Sept.	Oct. to Dec.
Prenatal and Natal Group (including congenital malformations)	Stillbirths (late foetal deaths at or over 28 weeks gestation)	22.4	22.9	22.3	21.2	23.2	102	100	95	104
	Early Neonatal Deaths (infant deaths at ages under 1 week)	14.8	15.8	14.7	14.0	14.7	107	99	95	99
	Late Neonatal Deaths (infant deaths at ages 1 week and under 4 weeks)	2.9	3.7	2.7	2.4	2.7	128	93	83	93
	Post-neonatal Deaths (infant deaths at ages 4 weeks and under 1 year)	9.1	13.8	7.2	6.0	9.7	150	78	65	105
Infant deaths (total under 1 year)		26.8	33.3	24.5	22.3	27.2	124	91	83	101
Prenatal and Natal Group (including congenital malformations)	Congenital malformations (750-759)	4.3	4.6	4.0	4.2	4.4	107	93	98	102
	Total causes mainly of prenatal and natal origin other than congenital malformations	12.9	13.7	12.6	12.2	13.2	106	98	95	102
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	5.2	5.4	5.2	4.7	5.4	104	100	90	104
	Attributed to maternal toxæmia (769)	0.2	0.2	0.2	0.2	0.2	—	—	—	—
	Ill-defined diseases of early infancy (773)	0.3	0.5	0.3	0.2	0.3	—	—	—	—
	Postnatal asphyxia and atelectasis (762)	3.6	3.8	3.4	3.5	3.9	106	94	97	108
	Intracranial and spinal injury at birth (760)	2.2	2.3	2.2	2.3	2.0	105	100	105	91
	Other birth injury (including maternal antepartum hæmorrhage) (761)	0.5	0.5	0.4	0.5	0.5	—	—	—	—
	Erythroblastosis (770)	0.6	0.6	0.6	0.6	0.6	100	100	100	100
	Hæmorrhagic disease of newborn (771)	0.3	0.3	0.3	0.2	0.3	—	—	—	—

Postnatal Group	Total causes mainly of postnatal origin	..	..	..	8-3	13-4	6-5	4-8	8-3	161	78	58	100
UNCLASSIFIED	Gastro-enteritis (including diarrhoea of newborn) (571, 764)	..	..	..	1-0	1-2	0-9	0-9	0-9	120	90	90	90
	Pneumonia and bronchitis (490-493, 763; 500-502)	..	..	..	5-0	8-8	3-5	2-3	5-3	176	70	46	106
	Causes classified as infective (001-138); others mainly infective in origin (340; 391-393; 470-483; 518, 519; 690-698; 765-768)	..	..	..	1-5	2-2	1-2	1-0	1-4	147	80	67	93
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	..	..	..	0-6	0-8	0-7	0-4	0-5	133	117	67	83
	Lack of care; neglect (including foundlings); infanticide (E926; E980-E985)	..	..	..	0-2	0-2	0-2	0-2	0-1	—	—	—	—
	Other accidental causes (remainder E800-E999)	..	..	..	0-1	0-2	0-1	0-1	0-1	—	—	—	—
	Total causes remaining	..	..	..	1-4	1-6	1-4	1-1	1-2	114	100	79	86
Immaturity, or with mention of immaturity (774; 776; 760-5-773-5)	..	..	..	..	9-3	10-0	9-0	8-6	9-7	108	97	92	104
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	..	..	..	5-2	5-4	5-2	4-7	5-4	104	100	90	104
Immaturity associated with diseases of early infancy (760-5-773-5)	..	..	..	..	4-1	4-6	3-9	3-9	4-2	112	95	95	102
	..	..	..	..	17-5	23-3	15-5	13-7	17-5	133	89	78	100
All other causes (760-0-773-0 and remainder)													

* Stillbirth rates are per 1,000 total births. Infant mortality rates from all causes are per 1,000 related live births

Table XLV.—Infant Mortality per 1,000 Related Live Births, and combined Stillbirth and Infant Death Rates per 1,000 Total Births, according to Age. England and Wales, Standard Regions and Conurbations, 1953

Infant mortality per 1,000 related live births at various ages										Stillbirths and infant deaths. Rates per 1,000 total births					
Standard Regions and Conurbations within the standard regions	Total infant mortality (under 1 year)	Post-neonatal period						Stillbirths plus infant deaths under 1 year	Stillbirths (late fetal deaths at or over 28 weeks gestation)	Stillbirths plus infant deaths under 1 week	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks			
		Early neonatal period		Post-neonatal period											
		Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Under 1 day	1 day and under 1 week						4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year
ENGLAND AND WALES	26.8	17.7	14.8	2.9	9.1	7.4	7.4	3.4	3.0	2.7	48.6	22.4	36.9	11.7	39.7
Standard Regions:															
NORTH OF ENGLAND															
.. ..	30.9	19.3	16.4	2.9	11.6	8.3	8.1	4.4	4.0	3.2	53.4	23.3	39.3	14.1	42.1
.. ..	30.5	19.8	16.6	3.2	10.7	8.4	8.2	4.0	3.5	3.2	53.3	23.6	39.8	13.4	42.9
.. ..	29.9	19.9	16.5	3.4	10.0	8.3	8.2	3.8	3.3	2.9	54.1	25.0	41.1	12.9	44.4
MIDLANDS AND EAST. REGIONS															
.. ..	27.8	18.0	14.9	3.1	9.8	7.2	7.6	3.3	3.4	3.0	50.0	22.9	37.4	12.5	40.5
.. ..	27.8	18.9	15.6	3.3	8.9	8.0	7.6	3.2	2.9	2.7	50.4	23.3	38.5	11.9	41.7
.. ..	23.3	15.7	13.0	2.7	7.6	6.7	6.3	3.1	2.4	2.1	42.8	20.0	32.8	10.0	35.4
SOUTH OF ENGLAND															
.. ..	22.6	15.0	12.8	2.2	7.6	6.5	6.3	2.7	2.5	2.3	42.3	20.2	32.8	9.5	34.9
.. ..	23.4	15.4	13.2	2.2	8.0	6.2	6.9	3.1	2.7	2.2	43.8	21.0	33.9	9.9	36.1
.. ..	24.6	16.5	14.3	2.2	8.1	7.0	7.3	3.0	2.5	2.6	44.5	20.4	34.5	10.0	36.6
WALES (including Monmouthshire)															
.. ..	31.7	19.6	15.6	4.0	12.1	8.0	7.6	4.7	4.3	3.1	56.6	25.8	41.0	15.6	44.9
.. ..	30.4	20.0	16.1	3.9	10.4	7.2	8.9	5.1	2.9	2.3	53.7	24.1	39.8	13.9	43.6
Conurbations within Standard Regions:															
.. ..	29.9	19.8	16.5	3.3	10.1	8.9	7.6	4.0	3.4	2.7	53.2	24.0	40.1	13.0	43.3
.. ..	31.3	19.1	16.3	2.8	12.2	8.0	8.3	4.6	4.3	3.4	53.5	23.0	38.9	14.5	41.6
.. ..	30.5	19.6	16.4	3.2	10.9	8.7	7.7	4.1	3.1	3.7	51.7	22.0	38.0	13.7	41.1
.. ..	30.5	19.9	16.8	3.1	10.6	8.2	8.6	4.0	3.8	2.8	54.3	24.6	41.0	13.3	44.0
S.E. Lancashire conurbation															
.. ..	28.0	19.3	16.5	2.8	8.7	8.8	7.6	3.3	2.8	2.6	52.4	25.2	41.2	11.2	44.0
.. ..	32.8	20.8	16.7	4.1	12.0	8.3	8.4	4.7	4.3	3.1	56.2	24.3	40.6	15.6	44.5
.. ..	29.7	19.9	16.5	3.4	9.8	7.8	8.8	3.6	3.0	3.1	54.3	25.4	41.5	12.8	44.8
West Midlands conurbation															
.. ..	27.8	18.0	14.8	3.2	9.8	7.3	7.6	3.3	3.2	3.3	51.5	24.4	38.8	12.6	42.0
.. ..	27.8	19.8	16.3	3.5	8.0	8.7	7.6	3.1	2.6	2.3	49.3	22.1	38.1	11.2	41.5
Greater London conurbation															
.. ..	22.5	15.1	12.9	2.2	7.4	6.7	6.2	2.6	2.5	2.3	42.5	20.6	33.2	9.3	35.3
.. ..	22.8	15.0	12.5	2.5	7.8	6.0	6.5	3.1	2.4	2.3	41.4	19.0	31.3	10.1	33.7

Table XLVI.—Secular Trend of Stillbirths per 1,000 total births, 1930-1953, and of Deaths in the Neonatal, Post-neonatal and other Age Periods under One Year per 1,000 live births, 1906-1953. England and Wales

Quinquennium and year	Total infant mortality (under 1 year)	Infant mortality per 1,000 live births,* at various ages										Stillbirths and infant deaths—Rates per 1,000 total births†					
		Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period			Post-neonatal period			Stillbirths plus infant deaths under 1 year	Stillbirths (late fetal deaths, at or over 28 weeks gestation)	Stillbirths plus infant deaths under 1 week—"Perinatal Mortality"	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks	
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year							
1906-1910	117.1	40.2	24.5	15.7	76.9	11.5	13.0	22.8	22.0	32.1	—	—	—	—	—	—	—
1911-1915	108.7	39.0	24.1	14.9	69.8	11.4	12.7	20.2	19.6	30.0	—	—	—	—	—	—	—
1916-1920	90.9	37.0	23.4	13.7	53.9	11.0	12.4	16.5	14.6	22.8	—	—	—	—	—	—	—
1921-1925	74.9	33.4	21.7	11.7	41.6	10.4	11.3	12.8	11.3	17.5	—	—	—	—	—	—	—
1926-1930	67.6	31.8	21.8	9.9	35.7	10.3	11.5	10.8	9.5	15.4	—	—	—	—	—	—	—
1931-1935	61.9	31.4	22.4	9.0	30.5	10.7	11.7	9.9	8.5	12.1	—	—	—	—	—	—	—
1936-1940	55.3	29.2	21.5	7.7	26.0	10.4	11.2	8.8	7.8	9.4	—	—	—	—	—	—	—
1941-1945	49.8	26.0	18.7	7.2	23.8	9.3	9.5	8.9	7.7	7.2	—	—	—	—	—	—	—
1946-1950	36.3	21.1	16.2	4.9	15.2	7.9	8.4	5.8	5.0	4.4	—	—	—	—	—	—	—
1930	60.2	30.9	22.0	8.9	29.3	10.4	11.6	9.7	7.9	11.7	98.3	40.8	61.9	36.4	70.4	70.4	70.4
1931	65.7	31.5	22.1	9.5	34.2	10.4	11.7	10.8	9.2	14.2	104.5	40.9	62.1	42.4	71.2	71.2	71.2
1932	64.5	31.5	22.4	9.2	33.0	10.6	11.8	10.8	9.0	13.2	103.7	41.3	62.8	40.8	72.3	72.3	72.3
1933	62.7	32.1	22.9	9.3	30.6	11.0	11.8	9.8	8.6	12.2	102.5	41.4	63.4	39.1	73.5	73.5	73.5
1934	59.3	31.4	22.7	8.7	27.9	10.9	11.8	8.9	7.7	11.3	96.7	40.5	62.2	34.5	74.5	74.5	74.5
1935	57.0	30.4	22.0	8.4	26.6	10.7	11.3	9.1	7.7	9.8	95.4	40.7	61.9	33.5	75.5	75.5	75.5
1936	58.7	30.2	21.9	8.2	28.5	10.7	11.3	9.3	8.3	10.9	95.9	39.7	60.8	35.2	76.5	76.5	76.5
1937	57.7	29.7	22.0	7.8	28.0	10.8	11.2	9.4	8.3	10.3	94.4	39.0	60.2	34.2	77.5	77.5	77.5
1938	52.8	28.3	21.1	7.1	24.5	10.3	10.8	8.2	7.3	9.0	88.9	38.3	58.6	30.4	78.5	78.5	78.5
1939	50.6	28.3	21.2	7.1	22.2	10.3	10.9	7.9	7.0	7.3	86.9	38.1	58.5	28.4	79.5	79.5	79.5
1940	56.8	29.6	21.3	8.3	27.2	9.8	11.5	9.3	8.2	9.7	92.5	37.2	57.7	34.7	80.5	80.5	80.5
1941	60.0	29.0	20.7	8.3	31.1	10.1	10.6	11.3	9.7	10.1	92.4	34.8	54.7	37.7	81.5	81.5	81.5
1942	50.6	27.2	19.6	7.7	23.4	9.6	10.0	8.7	7.5	7.2	81.1	33.2	52.1	29.0	82.5	82.5	82.5
1943	49.1	25.2	18.3	6.9	23.9	9.1	9.2	8.8	7.8	7.3	77.5	30.1	47.9	29.6	83.5	83.5	83.5
1944	45.4	24.4	17.5	6.9	21.1	8.8	8.8	8.0	7.0	6.1	70.9	27.6	44.5	26.3	84.5	84.5	84.5
1945	46.0	24.8	18.0	6.8	21.3	9.0	9.0	8.2	7.0	6.1	73.4	27.6	45.2	28.1	85.5	85.5	85.5
1946	42.9	24.5	17.8	6.7	18.4	8.7	9.1	7.1	6.1	5.2	66.9	27.2	44.3	22.6	86.5	86.5	86.5
1947	41.4	22.7	16.5	6.2	18.6	7.8	8.7	6.9	6.0	5.7	65.0	24.1	40.3	24.6	87.5	87.5	87.5
1948	33.9	19.7	15.6	4.1	14.2	7.8	7.9	5.5	4.8	3.9	56.9	23.2	38.5	18.4	88.5	88.5	88.5
1949	32.4	19.3	15.6	3.7	13.0	7.6	8.0	4.8	4.4	3.8	54.6	22.7	38.0	16.7	89.5	89.5	89.5
1950	29.6	18.5	15.2	3.3	11.1	7.2	8.0	4.3	3.7	3.1	51.7	22.6	37.4	14.3	90.5	90.5	90.5
1951	29.7	18.8	15.5	3.3	10.9	7.5	8.0	4.1	3.6	3.2	52.2	23.0	38.2	14.0	91.5	91.5	91.5
1952	27.6	18.3	15.2	3.2	9.3	7.6	7.6	3.7	3.0	2.6	49.6	22.7	37.5	12.1	92.5	92.5	92.5
1953	26.8	17.7	14.8	2.9	9.1	7.4	7.4	3.4	3.0	2.7	48.6	22.4	36.9	11.7	93.5	93.5	93.5

* Rates based on related live births from 1926 onwards.

† The births upon which these rates are based for successive calendar years are numbers registered up to 1938 inclusive and numbers of occurrences from 1939.

Table XLVII.—Infant Mortality per 1,000 Related Live Births, and combined Stillbirth and Infant Death Rates per 1,000 Total Births, according to Age. England and Wales, and Aggregates by type of area within Regional Groups, 1953

Regional groups and aggregates by type of area	Infant mortality per 1,000 related live births, at various ages										Stillbirths and infant deaths. Rates per 1,000 total births				
	Total infant morta- lity (under 1 year)	Neo- natal morta- lity (under 4 weeks)	Early neonatal morta- lity (under 1 week)	Late neonatal morta- lity (1 week and under 4 weeks)	Post- neonatal morta- lity (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			Still- births plus infant deaths under 1 year	Still- births (late fetal deaths at or over 28 weeks gesta- tion)	Still- births plus infant deaths under 1 week	Infant deaths at 1 week and over	Still- births plus infant deaths under 4 weeks
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months under 6 months	6 months and under 1 year					
ENGLAND AND WALES	26.8	17.7	14.8	2.9	9.1	7.4	7.4	3.4	3.0	2.7	48.6	22.4	36.9	11.7	39.7
Conurbations	26.3	17.4	14.6	2.8	8.9	7.6	7.1	3.2	2.9	2.8	48.2	22.5	36.8	11.4	39.5
Other urban areas: with populations of 100,000 and over	28.2	18.2	15.3	2.9	10.0	7.4	7.9	3.7	3.5	2.8	50.8	23.3	38.3	12.6	41.2
with populations of 50,000 to 100,000	28.6	19.0	15.8	3.2	9.6	7.7	8.1	3.8	3.2	2.6	50.4	22.5	37.9	12.5	41.0
with populations of under 50,000 ..	27.0	17.6	14.6	3.0	9.4	7.3	7.3	3.6	3.1	2.7	49.1	22.7	37.0	12.1	39.9
Rural Districts	26.0	17.3	14.6	2.7	8.7	7.2	7.4	3.3	2.8	2.6	46.6	21.2	35.5	11.0	38.1
NORTH OF ENGLAND (Northern, E. and W. Ridings, N. Western)	30.3	19.7	16.5	3.2	10.6	8.3	8.2	4.0	3.5	3.1	53.7	24.2	40.3	13.4	43.4
Conurbations (Tyneside, W. Yorks., S.E. Lancs., Merseyside)	30.1	19.8	16.5	3.3	10.3	8.7	7.8	3.9	3.3	3.0	53.3	24.0	40.1	13.2	43.3
Other urban areas: with populations of 100,000 and over	32.2	19.5	16.3	3.2	12.7	7.9	8.3	4.7	4.6	3.4	57.5	26.2	42.1	15.4	45.2
with populations of 50,000 to 100,000	31.3	21.1	17.9	3.2	10.2	8.9	9.0	4.3	3.4	2.5	56.0	25.5	43.0	13.0	46.1
with populations of under 50,000 ..	29.5	19.0	15.8	3.2	10.5	7.5	8.3	3.7	3.4	3.4	52.2	23.5	38.9	13.3	42.0
Rural Districts	29.8	19.7	17.1	2.6	10.1	8.3	8.8	3.8	3.3	3.0	52.0	22.9	39.6	12.4	42.2

MIDLANDS AND EAST. REGIONS (N. Midland, Midland, Eastern)	26.5	17.7	14.6	3.1	8.8	7.4	7.2	3.2	2.9	2.7	48.1	22.2	36.5	11.6	39.6
Conurbation (West Midlands) ..	27.8	18.0	14.8	3.2	9.8	7.3	7.6	3.3	3.2	3.3	51.5	24.4	38.8	12.6	42.0
Other urban areas: with populations of 100,000 and over	26.7	18.5	15.7	2.7	8.2	7.7	8.0	3.2	2.6	2.4	47.7	21.6	37.0	10.7	39.7
with populations of 50,000 to 100,000	28.1	18.8	15.2	3.5	9.3	7.5	7.7	3.8	2.9	2.6	47.6	20.1	35.0	12.5	38.5
with populations of under 50,000 ..	27.1	17.9	14.3	3.6	9.2	7.5	6.8	3.4	3.3	2.5	48.7	22.2	36.2	12.5	39.7
Rural Districts	24.3	16.5	13.8	2.7	7.8	7.1	6.7	2.8	2.5	2.5	45.6	21.8	35.4	10.2	38.0
SOUTH OF ENGLAND (London and S.E., Southern, S. Western)	23.1	15.4	13.2	2.2	7.7	6.6	6.6	2.8	2.5	2.4	43.0	20.4	33.3	9.7	35.5
Conurbation (Greater London) ..	22.5	15.1	12.9	2.2	7.4	6.7	6.2	2.6	2.5	2.3	42.5	20.6	33.2	9.3	35.3
Other urban areas: with populations of 100,000 and over	24.5	16.3	14.3	2.1	8.2	6.5	7.8	3.1	2.9	2.2	46.5	22.5	36.5	10.0	38.5
with populations of 50,000 to 100,000	25.1	16.3	13.6	2.7	8.8	6.5	7.1	3.5	2.7	2.6	44.5	20.0	33.3	11.2	35.9
with populations of under 50,000 ..	22.6	15.0	12.8	2.2	7.6	6.2	6.7	3.2	2.2	2.2	42.7	20.6	33.1	9.6	35.3
Rural Districts... ..	23.7	15.8	13.5	2.3	7.9	6.7	6.8	2.7	2.6	2.6	42.0	18.8	32.1	9.9	34.3
WALES (including Monmouthshire) ..	31.3	19.7	15.7	4.0	11.6	7.8	7.9	4.8	3.9	2.9	55.8	25.3	40.7	15.2	44.6
Urban areas with populations of 100,000 and over	30.1	18.2	13.4	4.8	11.9	6.9	6.5	4.0	4.3	3.6	51.8	22.4	35.6	16.2	40.3
Urban area with population of 50,000 to 100,000	43.8	26.0	21.9	4.2	17.8	8.3	13.5	1.0	12.5	4.3	91.0	49.5	70.2	20.8	74.2
Urban area with population of under 50,000	30.9	19.9	16.4	3.4	11.0	8.6	7.8	4.8	3.8	2.4	56.9	26.9	42.9	14.0	46.2
Rural Districts... ..	32.1	20.3	16.1	4.2	11.8	7.2	8.9	5.9	3.2	2.7	54.8	23.6	39.3	15.5	43.4

Table XLVIII.—Principal Causes of Death Under One Year; Death Rates per 1,000 Related Live Births in England and Wales and Four Regional Groups, 1953, showing the regional rates as percentages of corresponding national rates

Aetiological Group	Cause of Death (and International Classification numbers)	Infant Mortality Rates per 1,000 related live births					Regional Rates per cent of England and Wales rate				
		England and Wales	North of England	Midlands and Eastern Regions	South of England	Wales	England and Wales	North of England	Midlands and Eastern Regions	South of England	Wales
ALL CAUSES	All Causes	26.82	30.31	26.52	23.06	31.31	100	113	99	86	117
	Congenital malformations (750-759)	4.30	4.65	4.26	3.91	4.70	100	108	99	91	109
	Total causes mainly of prenatal and natal origin other than congenital malformations	12.92	14.46	13.00	11.22	14.68	100	112	101	87	114
Prenatal and Natal Group (including congenital malformations)	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	5.19	6.28	5.07	4.09	6.27	100	121	98	79	121
	Attributed to maternal toxæmia (769)	0.20	0.14	0.25	0.23	0.31	100	70	125	115	155
	Ill-defined diseases of early infancy (773)	0.33	0.28	0.32	0.29	0.92	100	85	97	88	279
	Postnatal asphyxia and atelectasis (762)	3.63	3.92	3.65	3.44	3.37	100	108	101	95	93
	Intracranial and spinal injury at birth (760)	2.20	2.51	2.18	1.93	2.22	100	114	99	88	101
	Other birth injury (including maternal antepartum hæmorrhage) (761)	0.48	0.49	0.50	0.43	0.72	100	102	104	90	150
	Erythroblastosis (770)	0.59	0.54	0.67	0.60	0.60	100	92	114	102	102
	Hæmorrhagic disease of newborn (771)	0.28	0.31	0.38	0.21	0.26	100	111	136	75	93
	Total causes mainly of postnatal origin	8.26	9.84	7.85	6.73	10.12	100	119	95	81	123
	Gastro-enteritis (including diarrhœa of newborn) (571, 764)	0.98	0.93	0.84	0.99	1.69	100	95	86	101	172
Postnatal Group	Pneumonia and bronchitis (490-493, 763; 500-502)	4.95	6.34	4.51	3.88	5.30	100	128	91	78	107
	Causes classified as infective (001-138); others mainly infective in origin *	1.47	1.58	1.63	1.15	1.81	100	107	111	78	123
	Whooping cough; measles (056, 085)	0.33	0.34	0.39	0.26	0.41	100	103	118	79	124
	Acute upper respiratory infections and influenza (470-475, 480-483)	0.15	0.21	0.15	0.12	0.10	100	140	100	80	67
	Otitis media and mastoiditis, empyema, pleurisy (391-393, 518, 519)	0.16	0.13	0.20	0.17	0.14	100	81	125	106	88
	Septicæmia, skin and subcutaneous tissue infections, sepsis of newborn (053, 690-698, 765-768)	0.18	0.22	0.20	0.10	0.29	100	122	111	56	161
	Tuberculosis, other than tuberculous meningitis (001-008, 011-019)	0.07	0.05	0.07	0.07	0.14	100	71	100	100	200

UNCLASSIFIED	Tuberculous meningitis (010)	0.03	0.03	0.02	0.02	—	100	100	67	67	—
	Meningococcal infections and non-meningococcal meningitis (057, 340)	0.42	0.48	0.43	0.32	0.60	100	114	102	76	143
	Causes classified as infective not specified above (remainder 001-138)	0.12	0.13	0.17	0.09	0.12	100	108	142	75	100
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	0.62	0.71	0.65	0.42	1.11	100	115	105	68	179
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985)	0.16	0.20	0.14	0.17	0.05	100	125	88	106	31
	Other accidental causes (remainder E800-E999)	0.10	0.08	0.08	0.11	0.17	100	80	80	110	170
	Total causes remaining	1.35	1.36	1.40	1.19	1.81	100	101	104	88	134
	Neoplasms (140-239)	0.10	0.08	0.13	0.12	0.05	100	80	130	120	50
	Other remaining causes	1.24	1.28	1.27	1.07	1.76	100	103	102	86	142
	Immaturity, or with mention of immaturity (774; 776; 760.5-773.5)	9.31	10.42	9.27	8.13	10.63	100	112	100	87	114
IMMATURE	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	5.19	6.28	5.07	4.09	6.27	100	121	98	79	121
	Immaturity associated with diseases of early infancy (760.5-773.5)	4.12	4.14	4.20	4.04	4.36	100	100	102	98	106
	All other causes (760.0-773.0 and remainder)	17.51	19.89	17.25	14.93	20.68	100	114	99	85	118

* 340, 391-393, 470-483, 518, 519, 690-698, 765-768.

Table XLIX.—Secular Trend of Total and Illegitimate Stillbirths per 1,000 total births, and of Total and Illegitimate Deaths in Early Neonatal, Late Neonatal and Post-neonatal Periods per 1,000 related live births. England and Wales, 1936-1953

[illegible]

Table L.—Secular Trend of Stillbirths per 1,000 total births, and of Deaths in the Neonatal and Post-neonatal Periods per 1,000 related live births. England and Wales; Standard Regions, 1949 to 1953

	Standard Regions	Rates in each year 1949 to 1953					Rates in 1950 to 1953 per cent of rate in 1949				
		1949	1950	1951	1952	1953	1949	1950	1951	1952	1953
STILLBIRTHS (at or over 28 weeks gestation) per 1,000 live and stillbirths	ENGLAND AND WALES	22.7	22.6	23.0	22.7	22.4	100	100	101	100	99
	NORTH OF ENGLAND	24.7	24.3	24.8	24.8	24.2	100	98	100	100	98
	Northern	24.6	25.8	24.6	24.9	23.3	100	105	100	101	95
	East and West Ridings ..	23.5	22.9	24.2	23.9	23.6	100	97	103	102	100
	North Western ..	25.5	24.4	25.2	25.2	25.0	100	96	99	99	98
	MIDLANDS AND EAST- ERN REGIONS	22.2	22.6	23.1	22.2	22.2	100	102	104	100	100
	North Midland ..	22.2	23.0	23.1	22.5	22.9	100	104	104	101	103
	Midland	23.1	23.8	23.9	22.7	23.3	100	103	103	98	101
	Eastern	20.9	20.6	21.9	21.1	20.0	100	99	105	101	96
	SOUTH OF ENGLAND	20.2	20.1	20.9	20.2	20.4	100	100	103	100	101
	London and South Eastern	19.9	19.6	20.8	20.0	20.2	100	98	105	101	102
	Southern	19.4	18.9	19.4	20.0	21.0	100	97	100	103	108
	South Western ..	22.0	22.5	22.3	21.0	20.4	100	102	101	95	93
	WALES (including Monmouthshire) ..	28.2	27.2	26.4	28.0	25.3	100	96	94	99	90
NEONATAL MORTALITY per 1,000 related live births	ENGLAND AND WALES	19.3	18.5	18.8	18.3	17.7	100	96	97	95	92
	NORTH OF ENGLAND	21.2	20.2	20.6	20.3	19.7	100	95	97	96	93
	Northern	22.0	20.8	21.6	20.2	19.3	100	95	98	92	88
	East and West Ridings ..	20.6	19.5	19.1	18.9	19.8	100	95	93	92	96
	North Western ..	21.3	20.3	20.9	21.1	19.9	100	95	98	99	93
	MIDLANDS AND EAST- ERN REGIONS	18.4	18.4	18.5	18.0	17.7	100	100	101	98	96
	North Midland ..	18.8	18.9	17.6	18.9	18.0	100	101	94	101	96
	Midland	19.6	19.4	20.3	18.6	18.9	100	99	104	95	96
	Eastern	16.2	16.3	16.8	16.2	15.7	100	101	104	100	97
	SOUTH OF ENGLAND	17.4	16.5	17.0	16.4	15.4	100	95	98	94	89
	London and South Eastern	16.8	15.9	16.7	15.7	15.0	100	95	99	93	89
	Southern	17.6	16.7	16.9	16.3	15.4	100	95	96	93	87
	South Western ..	19.7	18.5	18.2	18.8	16.5	100	94	92	95	84
	WALES (including Monmouthshire) ..	22.9	21.6	21.8	20.8	19.7	100	94	95	91	86
POST- NEONATAL MORTALITY per 1,000 related live births	ENGLAND AND WALES	13.0	11.1	10.9	9.3	9.1	100	85	84	72	71
	NORTH OF ENGLAND	17.8	14.6	13.8	11.3	10.6	100	82	78	63	60
	Northern	19.9	16.9	15.5	11.9	11.6	100	85	78	60	59
	East and West Ridings ..	15.4	13.3	13.8	11.0	10.7	100	86	90	71	69
	North Western ..	18.1	14.2	13.0	11.3	10.0	100	78	72	62	55
	MIDLANDS AND EAST- ERN REGIONS	12.4	10.6	10.5	9.2	8.8	100	85	85	74	71
	North Midland ..	13.8	11.7	11.1	9.6	9.8	100	85	80	70	70
	Midland	13.8	11.8	11.3	10.2	8.9	100	86	82	74	64
	Eastern	8.6	7.6	8.6	7.1	7.6	100	88	100	83	88
	SOUTH OF ENGLAND	8.8	7.8	7.8	6.9	7.7	100	89	89	78	87
	London and South Eastern	8.8	7.8	7.4	6.9	7.6	100	89	84	78	85
	Southern	8.6	7.9	8.3	7.1	8.0	100	92	97	83	93
	South Western ..	9.1	7.9	8.3	6.8	8.1	100	87	91	75	89
	WALES (including Monmouthshire) ..	16.4	13.9	14.3	12.5	11.6	100	85	87	76	71

Table LI.—Perinatal mortality (stillbirths and deaths under 1 week of age) and Post-perinatal mortality (deaths at ages from 1 week to 1 year) : Numbers and rates per 1,000 total births in each County Borough and County Urban and Rural Aggregate in each of four regional groups within England and Wales, 1952-53.

	Total births	Perinatal mortality		Post-perinatal mortality	
		Number	Rate	Number	Rate
NORTH OF ENGLAND					
Cheshire	39,444	1,465	37·14	500	12·68
County Boroughs	14,923	576	38·60	218	14·61
Birkenhead	5,420	227	41·88	84	15·50
Chester	1,715	64	37·32	19	11·08
Stockport	4,386	148	33·74	69	15·73
Wallasey	3,402	137	40·27	46	13·52
Admin. County					
Urban Districts	18,447	687	37·24	198	10·73
Rural Districts	6,074	202	33·26	84	13·83
Cumberland	9,905	395	39·88	129	13·02
County Borough					
Carlisle	2,372	92	38·79	22	9·27
Admin. County					
Urban Districts	3,114	127	40·78	43	13·81
Rural Districts	4,419	176	39·83	64	14·48
Derbyshire (part)	2,063	79	38·29	25	12·12
Urban Districts					
Buxton M.B.	1,541	53	34·39	19	12·33
Glossop M.B.					
New Mills U.D.					
Whaley Bridge U.D.					
Rural District					
Chapel en le Frith	522	26	49·81	6	11·49
Durham	53,603	2,140	39·92	887	16·55
County Boroughs	21,057	820	38·94	397	18·85
Darlington	2,576	107	41·54	47	18·25
Gateshead	4,155	179	43·08	79	19·01
South Shields	4,101	154	37·55	66	16·09
Sunderland	7,324	266	36·32	146	19·93
West Hartlepool	2,901	114	39·30	59	20·34
Admin. County					
Urban Districts	22,646	935	41·29	333	14·70
Rural Districts	9,900	385	38·89	157	15·86
Lancashire	168,494	7,176	42·59	2,391	14·19
County Boroughs	107,273	4,667	43·51	1,610	15·01
Barrow-in-Furness	2,157	81	37·55	34	15·76
Blackburn	3,018	141	46·72	34	11·27
Blackpool	3,316	149	44·93	32	9·65
Bolton	4,948	191	38·60	64	12·93
Bootle	3,210	134	41·74	57	17·76
Burnley	2,455	112	45·62	30	12·22
Bury	1,785	79	44·26	16	8·96
Liverpool	32,801	1,369	41·74	556	16·95
Manchester	25,410	1,159	45·61	343	13·50
Oldham	3,790	169	44·59	64	16·89
Preston	3,978	157	39·47	58	14·58
Rochdale	2,692	118	43·83	35	13·00
St. Helens	3,971	201	50·62	77	19·39
Salford	6,219	261	41·97	94	15·11
Southport	1,969	91	46·22	22	11·17
Warrington	2,807	110	39·19	42	14·96
Wigan	2,747	145	52·78	52	18·93

Table LI.—*continued.*

				Total births	Perinatal mortality		Post-perinatal mortality		
					Number	Rate	Number	Rate	
NORTH OF ENGLAND—continued									
Lancashire—continued									
Admin. County									
Urban Districts				52,379	2,162	41·28	687	13·12	
Rural Districts				8,842	347	39·24	94	10·63	
Northumberland					27,211	1,079	39·65	366	13·45
County Boroughs					12,504	512	40·95	160	12·80
Newcastle upon Tyne				9,962	397	39·85	123	12·35	
Tynemouth				2,542	115	45·24	37	14·56	
Admin. County									
Urban Districts				11,694	466	39·85	170	14·54	
Rural Districts				3,013	101	33·52	36	11·95	
Westmorland					1,932	93	48·14	12	6·21
Admin. County									
Urban Districts				805	37	45·96	5	6·21	
Rural Districts				1,127	56	49·69	7	6·21	
Yorkshire, East Riding					18,134	719	39·65	299	16·49
County Borough									
Kingston upon Hull				11,603	489	42·14	232	19·99	
Admin. County									
Urban Districts				3,161	98	31·00	38	12·02	
Rural Districts				3,370	132	39·17	29	8·61	
Yorkshire, North Riding					18,813	726	38·59	277	14·72
County Borough									
Middlesbrough				6,447	245	38·00	126	19·54	
Admin. County									
Urban Districts				6,866	257	37·43	96	13·98	
Rural Districts				5,500	224	40·73	55	10·00	
Yorkshire, West Riding					112,727	4,462	39·58	1,478	13·11
County Boroughs					61,745	2,419	39·18	809	13·10
Barnsley				2,806	108	38·49	52	18·53	
Bradford				9,411	412	43·78	150	15·94	
Dewsbury				1,831	83	45·33	30	16·38	
Doncaster				2,460	111	42·05	23	8·71	
Halifax				2,894	97	33·52	44	15·20	
Huddersfield				3,767	124	32·92	49	13·01	
Leeds				16,101	636	39·50	206	12·79	
Rotherham				2,751	114	41·44	36	13·09	
Sheffield				14,429	513	35·55	158	10·95	
Wakefield				1,898	80	42·15	32	16·86	
York				3,217	141	43·83	29	9·01	
Admin. County									
Urban Districts				36,495	1,464	40·12	468	12·82	
Rural Districts				14,487	579	39·97	201	13·87	
Summary :									
Total County Boroughs				237,924	9,820	41·27	3,574	15·02	
Total Urban Districts				157,148	6,286	40·00	2,057	13·09	
Total Rural Districts				57,254	2,228	38·91	733	12·80	
MIDLANDS AND EASTERN REGIONS									
Bedfordshire					9,741	345	35·42	111	11·40
Admin. County									
Urban Districts				6,644	243	36·57	75	11·29	
Rural Districts				3,097	102	32·94	36	11·62	

Table LI.—*continued.*

	Total births	Perinatal mortality		Post-perinatal mortality	
		Number	Rate	Number	Rate
MIDLANDS AND EASTERN REGIONS—<i>continued</i>					
Cambridgeshire	5,451	165	30·27	42	7·71
<i>Admin. County</i>					
Urban District	2,657	84	31·61	23	8·66
Rural Districts	2,794	81	28·99	19	6·80
Derbyshire (other than those areas stated in North of England) ..	23,844	909	38·12	312	13·09
<i>County Borough</i>					
Derby	4,351	180	41·37	45	10·34
<i>Admin. County</i>					
Urban Districts	9,463	361	38·15	145	15·32
Rural Districts	10,030	368	36·69	122	12·16
Ely, Isle of	3,056	115	37·63	21	6·87
<i>Admin. County</i>					
Urban Districts	1,843	73	39·61	15	8·14
Rural Districts	1,213	42	34·62	6	4·95
Essex (other than those areas stated in South of England)	32,022	1,071	33·45	317	9·90
<i>County Borough</i>					
Southend-on-Sea	4,190	118	28·16	30	7·16
<i>Admin. County</i>					
Urban Districts	20,365	684	33·59	232	11·39
Rural Districts	7,467	269	36·03	55	7·37
Herefordshire	4,291	150	34·96	44	10·25
<i>Admin. County</i>					
Urban Districts	1,706	61	35·76	22	12·90
Rural Districts	2,585	89	34·43	22	8·51
Hertfordshire (other than those areas stated in South of England) ..	16,052	493	30·71	135	8·41
<i>Admin. County</i>					
Urban Districts	10,515	337	32·05	96	9·13
Rural Districts	5,537	156	28·17	39	7·04
Huntingdonshire	2,396	98	40·90	22	9·18
<i>Admin. County</i>					
Urban Districts	1,030	47	45·63	13	12·62
Rural Districts	1,366	51	37·34	9	6·59
Leicestershire	20,512	745	36·32	237	11·55
<i>County Borough</i>					
Leicester	9,388	328	34·94	114	12·14
<i>Admin. County</i>					
Urban Districts	5,318	206	38·74	62	11·66
Rural Districts	5,806	211	36·34	61	10·51
Lincolnshire (parts of Holland) ..	3,490	123	35·24	53	15·19
<i>Admin. County</i>					
Urban Districts	1,291	40	30·98	21	16·27
Rural Districts	2,199	83	37·74	32	14·55
Lincolnshire (parts of Kesteven) ..	4,370	185	42·33	74	16·93
<i>Admin. County</i>					
Urban Districts	1,430	69	48·25	27	18·88
Rural Districts	2,940	116	39·46	47	15·99

Table LI.—*continued.*

	Total births	Perinatal mortality		Post-perinatal mortality	
		Number	Rate	Number	Rate
MIDLANDS AND EASTERN REGIONS— <i>continued</i>					
Lincolnshire (parts of Lindsey) ..	16,203	604	37·28	252	15·55
County Boroughs ..	5,601	228	40·71	88	15·71
Grimsby	3,433	139	40·49	59	17·19
Lincoln	2,168	89	41·05	29	13·38
Admin. County					
Urban Districts	5,170	182	35·20	88	17·02
Rural Districts	5,432	194	35·71	76	13·99
Norfolk	16,960	570	33·61	182	10·73
County Boroughs	5,255	164	31·21	41	7·80
Great Yarmouth	1,501	54	35·98	9	6·00
Norwich	3,754	110	29·30	32	8·52
Admin. County					
Urban Districts	2,468	83	33·63	33	13·37
Rural Districts	9,237	323	34·97	108	11·69
Northamptonshire	11,499	418	36·35	100	8·70
County Borough					
Northampton	3,027	110	36·34	26	8·59
Admin. County					
Urban Districts	4,504	162	35·97	38	8·44
Rural Districts	3,968	146	36·79	36	9·07
Nottinghamshire	28,269	1,062	37·57	374	13·23
County Borough					
Nottingham	10,666	374	35·06	137	12·84
Admin. County					
Urban Districts	12,276	485	39·51	168	13·69
Rural Districts	5,327	203	38·11	69	12·95
Peterborough, Soke of	2,077	74	35·63	18	8·67
Admin. County					
Urban District	1,696	58	34·20	16	9·43
Rural Districts	381	16	41·99	2	5·25
Rutland	831	25	30·08	6	7·22
Admin. County					
Urban District	136	4	29·41	—	—
Rural Districts	695	21	30·22	6	8·63
Shropshire	9,570	373	38·98	100	10·45
Admin. County					
Urban Districts	4,642	189	40·72	52	11·20
Rural Districts	4,928	184	37·34	48	9·74
Staffordshire	53,711	2,214	41·22	791	14·73
County Boroughs	25,911	1,127	43·50	349	13·47
Burton upon Trent	1,733	66	38·08	25	14·43
Smethwick	2,275	76	33·41	33	14·51
Stoke on Trent	9,247	396	42·82	103	11·14
Walsall	4,245	217	51·12	61	14·37
West Bromwich	3,089	142	45·97	54	17·48
Wolverhampton	5,322	230	43·22	73	13·72
Admin. County					
Urban Districts	21,000	817	38·90	351	16·71
Rural Districts	6,800	270	39·71	91	13·38

Table LI.—*continued.*

	Total births	Perinatal mortality		Post-perinatal mortality	
		Number	Rate	Number	Rate
MIDLANDS AND EASTERN REGIONS— <i>continued</i>					
Suffolk, East	10,260	366	35·67	92	8·97
County Borough					
Ipswich	3,752	133	35·45	33	8·80
Admin. County					
Urban Districts	2,927	112	38·26	29	9·91
Rural Districts	3,581	121	33·79	30	8·38
Suffolk, West	4,055	142	35·02	46	11·34
Admin. County					
Urban Districts	1,354	54	39·88	19	14·03
Rural Districts	2,701	88	32·58	27	10·00
Warwickshire	62,678	2,275	36·30	687	10·96
County Boroughs	46,517	1,709	36·74	532	11·44
Birmingham	37,943	1,374	36·21	428	11·28
Coventry	8,574	335	39·07	104	12·13
Admin. County					
Urban Districts	10,257	346	33·73	94	9·16
Rural Districts	5,904	220	37·26	61	10·33
Worcestershire	16,988	600	35·32	213	12·54
County Boroughs	4,146	153	36·90	69	16·64
Dudley	2,066	75	36·30	43	20·81
Worcester	2,080	78	37·50	26	12·50
Admin. County					
Urban Districts	8,985	319	35·50	105	11·69
Rural Districts	3,857	128	33·19	39	10·11
Summary :					
Total County Boroughs	122,804	4,624	37·65	1,464	11·92
Total Urban Districts	137,677	5,016	36·43	1,724	12·52
Total Rural Districts	97,845	3,482	35·59	1,041	10·64
SOUTH OF ENGLAND					
Berkshire	13,661	453	33·16	123	9·00
County Borough					
Reading	3,495	121	34·62	39	11·16
Admin. County					
Urban Districts	3,333	106	31·80	28	8·40
Rural Districts	6,833	226	33·07	56	8·20
Buckinghamshire	12,185	369	30·28	113	9·27
Admin. County					
Urban Districts	6,115	191	31·23	63	10·30
Rural Districts	6,070	178	29·32	50	8·24
Cornwall	9,937	412	41·46	100	10·06
Admin. County					
Urban Districts	5,433	237	43·62	53	9·76
Rural Districts	4,504	175	38·85	47	10·44

Table LI.—*continued.*

	Total births	Perinatal mortality		Post-perinatal mortality	
		Number	Rate	Number	Rate
SOUTH OF ENGLAND—continued					
Devon	23,550	890	37·79	236	10·02
County Boroughs	9,602	371	38·64	108	11·25
Exeter	2,304	95	41·23	23	9·98
Plymouth	7,298	276	37·82	85	11·65
Admin. County					
Urban Districts	6,920	241	34·83	65	9·39
Rural Districts	7,028	278	39·56	63	8·96
Dorset	8,799	321	36·48	75	8·52
Admin. County					
Urban Districts	5,230	181	34·61	45	8·60
Rural Districts	3,569	140	39·23	30	8·41
Essex (part)	30,176	1,058	35·06	317	10·51
County Boroughs	9,026	316	35·01	108	11·97
East Ham	3,261	109	33·43	34	10·43
West Ham	5,765	207	35·91	74	12·84
Urban Districts					
Chingford M.B.	21,150	742	35·08	209	9·88
Wanstead & Woodford M.B.					
Leyton M.B.					
Walthamstow M.B.					
Ilford M.B.					
Barking M.B.					
Dagenham M.B.					
Waltham Holy Cross U.D.					
Chigwell U.D.					
Gloucestershire	30,435	1,025	33·68	311	10·22
County Boroughs	16,280	530	32·56	157	9·64
Bristol	14,019	447	31·89	120	8·56
Gloucester	2,261	83	36·71	37	16·36
Admin. County					
Urban Districts	4,606	177	38·43	56	12·16
Rural Districts	9,549	318	33·30	98	10·26
Hertfordshire (part)	3,562	99	27·79	39	10·95
Urban Districts					
Barnet U.D.	2,840	83	29·23	27	9·51
Bushey U.D.					
Cheshunt U.D.					
East Barnet U.D.					
Rural District					
Elstree	722	16	22·16	12	16·62
Kent	47,634	1,597	33·53	482	10·12
County Borough					
Canterbury	947	32	33·79	13	13·73
Admin. County					
Urban Districts	36,501	1,216	33·31	365	10·00
Rural Districts	10,186	349	34·26	104	10·21
London					
Admin. County	104,523	3,518	33·66	975	9·33
Middlesex					
Urban Districts	61,527	1,959	31·84	519	8·44

Table LI.—*continued.*

	Total births	Perinatal mortality		Post-perinatal mortality	
		Number	Rate	Number	Rate
SOUTH OF ENGLAND—continued					
Oxfordshire	9,514	288	30·27	98	10·30
County Borough					
Oxford	3,182	78	24·51	35	11·00
Admin. County					
Urban Districts	1,554	58	37·32	11	7·08
Rural Districts	4,778	152	31·81	52	10·88
Somerset	16,526	573	34·67	142	8·59
County Borough					
Bath	2,292	94	41·01	19	8·29
Admin. County					
Urban Districts	6,691	232	34·67	63	9·42
Rural Districts	7,543	247	32·75	60	7·95
Southampton	38,878	1,369	35·21	400	10·29
County Boroughs	16,903	678	40·11	194	11·48
Bournemouth	3,211	105	32·70	31	9·65
Portsmouth	7,703	291	37·78	88	11·42
Southampton	5,989	282	47·09	75	12·52
Admin. County					
Urban Districts	11,994	373	31·10	113	9·42
Rural Districts	9,981	318	31·86	93	9·32
Surrey	43,636	1,348	30·89	373	8·55
County Borough					
Croydon	7,112	244	34·31	58	8·16
Admin. County					
Urban Districts	32,034	969	30·25	275	8·58
Rural Districts	4,490	135	30·07	40	8·91
Sussex, East	15,236	513	33·67	130	8·53
County Boroughs	7,051	249	35·31	60	8·51
Brighton	4,210	153	36·34	35	8·31
Eastbourne	1,280	34	26·56	11	8·59
Hastings	1,561	62	39·72	14	8·97
Admin. County					
Urban Districts	4,147	128	30·87	38	9·16
Rural Districts	4,038	136	33·68	32	7·92
Sussex, West	8,647	283	32·73	72	8·33
Admin. County					
Urban Districts	4,118	142	34·48	34	8·26
Rural Districts	4,529	141	31·13	38	8·39
Wight, Isle of	2,493	76	30·49	24	9·63
Admin. County					
Urban Districts	2,027	58	28·61	22	10·85
Rural District	466	18	38·63	2	4·29
Wiltshire	12,575	401	31·89	118	9·38
Admin. County					
Urban Districts	5,775	178	30·82	56	9·70
Rural Districts	6,800	223	32·79	62	9·12
Summary :					
Total County Boroughs	75,890	2,713	35·75	791	10·42
Total Urban Districts	326,518	10,789	33·04	3,017	9·24
Total Rural Districts	91,086	3,050	33·48	839	9·21

Table LI.—*continued.*

	Total births	Perinatal mortality		Post-perinatal mortality	
		Number	Rate	Number	Rate
WALES (including Monmouthshire)					
Anglesey	1,725	75	43·48	29	16·81
<i>Admin. County</i>					
Urban Districts	691	29	41·97	10	14·47
Rural Districts	1,034	46	44·49	19	18·38
Brecknockshire	1,759	74	42·07	32	18·19
<i>Admin. County</i>					
Urban Districts	503	14	27·83	9	17·89
Rural Districts	1,256	60	47·77	23	18·31
Caernarvonshire	3,489	136	38·98	55	15·76
<i>Admin. County</i>					
Urban Districts	1,990	72	36·18	27	13·57
Rural Districts	1,499	64	42·70	28	18·68
Cardiganshire	1,436	55	38·30	19	13·23
<i>Admin. County</i>					
Urban Districts	451	18	39·91	4	8·87
Rural Districts	985	37	37·56	15	15·23
Carmarthenshire	4,919	211	42·89	71	14·43
<i>Admin. County</i>					
Urban Districts	1,912	92	48·12	25	13·08
Rural Districts	3,007	119	39·57	46	15·30
Denbighshire	5,370	230	42·83	85	15·83
<i>Admin. County</i>					
Urban Districts	2,319	94	40·53	38	16·39
Rural Districts	3,051	136	44·58	47	15·40
Flintshire	4,715	201	42·63	70	14·85
<i>Admin. County</i>					
Urban Districts	2,368	103	43·50	36	15·20
Rural Districts	2,347	98	41·76	34	14·49
Glamorganshire	40,528	1,725	42·56	664	16·38
<i>County Boroughs</i>					
Cardiff	16,061	663	41·28	264	16·44
Cardiff	9,036	332	36·74	124	13·72
Merthyr Tydfil	2,009	134	66·70	47	23·39
Swansea	5,016	197	39·27	93	18·54
<i>Admin. County</i>					
Urban Districts	18,026	778	43·16	296	16·42
Rural Districts	6,441	284	44·09	104	16·15
Merionethshire	1,159	42	36·24	12	10·35
<i>Admin. County</i>					
Urban Districts	533	23	43·15	4	7·50
Rural Districts	626	19	30·35	8	12·78
Monmouthshire	14,799	659	44·53	220	14·87
<i>County Borough</i>					
Newport	3,669	163	44·43	56	15·26
<i>Admin. County</i>					
Urban Districts	9,657	441	45·67	147	15·22
Rural Districts	1,473	55	37·34	17	11·54
Montgomeryshire	1,513	52	34·37	23	15·20
<i>Admin. County</i>					
Urban Districts	621	22	35·43	6	9·66
Rural Districts	892	30	33·63	17	19·06

Table LI.—*continued.*

	Total births	Perinatal mortality			Post-perinatal mortality	
		Number	Rate		Number	Rate
WALES—<i>continued</i>						
Pembrokeshire	3,207	143	44·59	30	9·35	
<i>Admin. County</i>						
Urban Districts	1,599	71	44·40	14	8·76	
Rural Districts	1,608	72	44·78	16	9·95	
Radnorshire	569	29	50·97	6	10·54	
<i>Admin. County</i>						
Urban Districts	192	9	46·88	—	—	
Rural Districts	377	20	53·05	6	15·92	
<i>Summary :</i>						
<i>Total County Boroughs</i>	19,730	826	41·87	320	16·22	
<i>Total Urban Districts</i>	40,862	1,766	43·22	616	15·08	
<i>Total Rural Districts</i>	24,596	1,040	42·28	380	15·45	
ENGLAND AND WALES						
Total County Boroughs	456,348	17,983	39·41	6,149	13·47	
Total Urban Districts	662,205	23,857	36·03	7,414	11·20	
Total Rural Districts	270,781	9,800	36·19	2,993	11·05	

MATERNAL MORTALITY

Deaths assigned to "maternal causes," i.e., certified as directly due to pregnancy or childbirth (Nos. 640-689 in the International Classification), numbered 527 in 1953, the rate being 0.75 per 1,000 total births (live and still).

The following table summarises the trend of maternal mortality since 1926 in England and Wales as a whole and in broad regional divisions. It is based on Table LIII (page 101) which gives the same information by individual years.

Year	England and Wales		South of England		Midlands and Eastern Regions		North of England		Wales	
	Rate per 100,000 total births*	per cent of 1926-30	Rate per 100,000 total births*	per cent of 1926-30	Rate per 100,000 total births*	per cent of 1926-30	Rate per 100,000 total births*	per cent of 1926-30	Rate per 100,000 total births*	per cent of 1926-30
1926-30	417	100	356	100	372	100	477	100	547	100
1931-35	413	99	349	98	377	101	462	97	585	107
1936-39	314	75	247	69	285	77	367	77	466	85
1940-44	239	57	215	60	223	60	263	55	313	57
1945-49	127	30	115	32	119	32	134	28	194	35
1950-53	79	19	77	22	70	19	82	17	113	21
1950	87	21	76	21	82	22	90	19	155	28
1951	82	20	74	21	64	17	96	20	123	22
1952	72	17	78	22	67	18	69	14	78	14
1953	75	18	80	22	68	18	72	15	94	17

* Live births only for 1926-28.

Since 1936-37, when maternal mortality began to fall, the decline has been substantial and relatively uninterrupted. The rate for 1953 of 0.75 per 1,000 total births is less than one-fifth of the average rate for the period 1926-30, which was 4.17. But, for the first time since before the war, it is higher than the rate for the preceding year.

The decline has been general throughout England and Wales. In England, improvement has been relatively greater in the North and the Midlands than in the South and differences between the North and the South are now much less than they were. This is shown in the following table:—

	Rate per 100,000 total births*				Per cent of rate in the South			
	1926-30	1936-39	1945-49	1950-53	1926-30	1936-39	1945-49	1950-53
South of England	356	247	115	77	100	100	100	100
Midlands and Eastern Regions ..	372	285	119	70	104	115	103	91
North of England	477	367	134	82	134	149	117	106
Wales	547	466	194	113	154	189	169	147

* Live births only for 1926-28.

The most favourable rate over the last few years is that for the Midlands and Eastern Regions. In 1936-39 the rate in England was lowest in the South and highest in the North, with the Midlands and East in an intermediate position. By 1950-53 the Midlands and East had taken first place, followed by the South and the North.

A further change of some interest is revealed when the last four years are studied individually. In 1952, and again in 1953, the Midlands and East had the most favourable rate, but the next best was that for the North of England. The South, formerly in the lead, had dropped behind.

The rate in Wales for 1950-53 was still higher than in any of the English regions, but in 1952 it equalled the rate in the South.

Tables relating to maternal mortality in the present volume

All rates in tables relating to years since 1929 inclusive are per 1,000 or per 100,000 total births, i.e., live births and stillbirths, but for years before 1929 the denominator is live births.

Table LIV (pages 102-104) show the distribution of the deaths in 1951, 1952 and 1953 respectively by cause, age and marital status for the country as a whole, while Table LV (page 105) gives the number of deaths in the period 1950-53 by age for leading maternal cause groups together with rates per 100,000 total births. (The number of live and stillbirths which form the denominators for these rates, and the number of maternities, are published annually by age of mother in quinary groupings in the "Fertility" tables in Part II of the Statistical Review, in which Table AA gives the data for England and Wales as a whole and Table BB for the standard regions, and for conurbations and other urban/rural aggregates.)

Table LVIII (page 110) shows the maternal mortality (per 100,000 total births) from 1950 in each of the standard regions, conurbations and urban/rural aggregates. (Births and maternal deaths at all ages in county boroughs and administrative counties are given in Tables 12 and 21 of Part I. Maternal deaths assigned to toxæmias (I.S.C. Nos. 642, 685, 686) and sepsis (I.S.C. Nos. 640-641, 681, 682, 684) and abortion (I.S.C. Nos. 650-652) are distinguished for each health administrative area. The 'sepsis' group includes deaths from thrombosis and embolism with or without actual sepsis; these deaths now outnumber others in the sepsis group and it is questionable whether 'infection' plays any part in their ætiology.)

Associated maternal deaths, i.e., those due to conditions other than the specific maternal causes, but where pregnancy, childbirth or abortion was mentioned as a secondary or contributory cause, are shown in Table LVII (pages 107-109) for each of the years 1951, 1952 and 1953.

Mortality rates in each year since 1931 from all maternal causes (maternal mortality as a whole) and from those individual causes for which information was available throughout the period are exhibited in Table LVI (page 106) which also includes mortality associated with maternal causes, but not assigned to them. The rates throughout this table are per 1,000 total births.

"Delayed" maternal deaths

Maternal mortality includes deaths at any time after childbirth if the condition assigned as the underlying cause was one of the diseases regarded as "maternal causes" and arose during pregnancy, childbirth or the puerperium. This has been the usual custom for many years—e.g., the 5th Revision of the International List included the following annotation at the head of the "maternal causes" section: "delayed deaths should be included in this section regardless of the interval between delivery and death." It is useful at the present time, chiefly because maternal mortality is now so low, to distinguish deaths which followed the onset of the maternal condition at an interval of more than

12 months. All certificates in which the practitioner has indicated a maternal condition as underlying cause, but has omitted to specify the interval between onset and death or otherwise failed to make it clear when the maternal condition occurred, are the subject of subsequent enquiry. From 1952 onwards the *numbers* of these maternal deaths have been separately shown in footnotes to Tables 7, 17, 19 and 21 in Part I of the Review. They continue meantime to be included but are not shown separately in all the published maternal mortality rates.

The following table (based on Table 19 for 1952 and 1953) shows relatively little difference in the proportion of “delayed” deaths at ages 15-24, 25-44, and 45 years and over as between the four major regional groups in England and Wales, but it will be noted that about 8·0 per cent of the assigned deaths in the Midlands and Eastern Regions at ages under 45 are “delayed” compared with 4·5 per cent in the South. It can be concluded that the slight increase in maternal mortality in the South of England in the last two years is not due to more frequent certifying of “delayed” deaths.

		Number of deaths				Percentage of maternal deaths classified as “delayed”			
		All ages	15—	25—	45 and over	All ages	15—	25—	45 and over
England and Wales	(a) All maternal deaths ..	1,025	176	815	34	7	3	5	59
	(b) “Delayed” deaths ..	67	5	42	20				
South of England	(a) All maternal deaths ..	391	68	305	18	7	3	5	50
	(b) “Delayed” deaths ..	26	2	15	9				
Midlands and Eastern	(a) All maternal deaths ..	241	49	187	5	9	6	9	60
	(b) “Delayed” deaths ..	22	3	16	3				
North of England	(a) All maternal deaths ..	320	52	258	10	5	—	3	70
	(b) “Delayed” deaths ..	15	—	8	7				
Wales	(a) All maternal deaths ..	73	7	65	1	5	—	5	100
	(b) “Delayed” deaths ..	4	—	3	1				

Table LII.—Deaths from maternal causes* (including abortion) in England and Wales and four regional groups†, 1921 to 1953

Year	England and Wales			North of England			Midlands and Eastern Regions			South of England			Wales (including Monmouthshire)		
	Total	Sepsis	Other	Total	Sepsis	Other	Total	Sepsis	Other	Total	Sepsis	Other	Total	Sepsis	Other
1921	3,322	1,171	2,151	1,363	479	884	879	306	573	724	275	449	356	111	245
1922	2,971	1,079	1,892	1,157	423	734	830	294	536	665	259	406	319	103	216
1923	2,892	1,085	1,907	1,121	362	759	851	299	552	603	231	372	317	93	224
1924	2,847	1,018	1,829	1,143	405	738	774	297	477	635	225	410	295	91	204
1925	2,900	1,110	1,790	1,177	433	744	824	347	477	626	243	383	273	87	186
1926	2,860	1,109	1,751	1,167	439	728	830	338	492	604	246	358	259	86	173
1927	2,690	1,026	1,664	1,082	396	686	764	313	451	573	240	333	271	77	194
1928	2,920	1,184	1,736	1,134	447	687	835	361	474	666	274	392	285	102	183
1929	2,787	1,157	1,630	1,089	451	638	814	330	484	621	291	330	263	85	178
1930	2,854	1,243	1,611	1,159	475	684	851	388	463	598	289	309	246	91	155
1931	2,601	1,050	1,551	1,004	384	620	781	326	455	586	260	326	230	80	150
1932	2,587	991	1,596	965	374	591	804	324	480	562	220	342	256	73	183
1933	2,618	1,061	1,557	1,028	399	629	781	342	439	569	234	335	240	86	154
1934	2,748	1,212	1,536	1,052	435	617	854	420	434	563	241	322	279	116	163
1935	2,457	1,006	1,451	920	365	555	791	343	448	502	204	298	244	94	150
1936	2,301	843	1,458	922	324	598	724	270	454	448	167	281	207	82	125
1937	1,988	596	1,392	768	231	537	636	203	433	406	110	296	178	52	126
1938	1,917	555	1,362	730	218	512	625	167	458	381	121	260	181	49	132
1939	1,815	476	1,339	688	185	503	601	163	438	354	94	260	172	34	138
1940	1,640	498	1,142	610	171	439	378	123	255	512	167	345	140	37	103
1941	1,677	499	1,178	609	167	442	384	116	268	528	171	357	156	45	111
1942	1,669	520	1,149	571	197	374	417	120	297	550	165	385	131	38	93
1943	1,613	517	1,096	553	178	375	381	112	269	543	183	360	136	44	92
1944	1,486	459	1,027	541	168	373	318	98	220	498	146	352	129	47	82
1945	1,257	340	917	446	130	316	295	77	218	396	107	289	120	26	94
1946	1,205	264	941	412	102	310	246	48	198	436	93	343	111	21	90
1947	1,058	233	825	348	73	275	250	55	195	374	96	278	86	9	77
1948	809	187	622	274	55	219	177	40	137	274	74	200	84	18	66
1949	727	162	565	251	55	196	162	29	133	252	63	189	62	15	47
1950	620	152	468	211	50	161	148	44	104	193	40	153	68	18	50
1951	566	136	430	216	46	170	114	28	86	184	52	130	52	8	44
1952	498	110	388	155	27	128	118	27	91	192	45	147	33	11	22
1953	527	110	427	165	§	§	123	§	§	199	§	§	40	§	§

* † See notes at foot of Table LIII(b)

§ Not available

Table LIII.—Death rates from maternal causes* (including abortion) per 100,000 total births† in England and Wales and four regional groups,† 1921 to 1953

Year	England and Wales			North of England			Midlands and Eastern Regions			South of England			Wales (including Monmouthshire)		
	Total	Sepsis	Other	Total	Sepsis	Other	Total	Sepsis	Other	Total	Sepsis	Other	Total	Sepsis	Other
1921	391	138	253	450	158	292	331	115	216	338	129	210	535	167	368
1922	381	138	243	421	154	267	339	120	219	330	128	201	543	175	368
1923	381	130	252	422	136	286	358	126	232	307	118	189	542	159	383
1924	390	139	251	440	156	284	339	130	209	344	122	222	514	158	355
1925	408	156	252	469	173	297	368	155	213	346	134	212	497	158	339
1926	412	160	252	475	179	296	377	154	224	343	140	203	492	163	329
1927	411	157	254	473	173	300	361	148	213	343	144	199	578	164	414
1928	425	172	252	472	186	286	373	161	212	382	157	225	579	207	372
1929	416	173	243	469	194	275	370	150	220	363	170	193	558	180	377
1930	422	184	238	496	203	293	380	173	207	347	168	179	530	196	334
1931	395	159	235	446	170	275	352	147	205	350	155	195	513	178	334
1932	404	155	249	440	171	270	374	151	223	345	135	210	591	169	423
1933	432	175	257	497	193	304	385	169	216	370	152	218	575	206	369
1934	441	195	247	494	204	290	405	199	206	359	154	205	661	275	386
1935	394	161	232	434	172	262	370	160	209	320	130	190	589	227	362
1936	365	134	231	436	153	283	331	123	208	280	104	176	517	205	312
1937	313	94	219	364	109	254	283	90	192	254	69	185	454	133	321
1938	297	86	211	342	102	240	271	72	199	235	75	160	457	124	333
1939	284	75	210	327	88	239	259	70	188	219	58	161	437	86	351
1940	268	81	186	294	82	211	252	82	170	222	72	149	339	90	250
1941	280	83	196	304	83	220	258	78	180	253	82	171	374	108	266
1942	248	77	171	266	92	174	248	72	177	223	67	156	292	85	207
1943	229	73	155	246	79	167	214	63	151	210	71	139	303	98	205
1944	192	59	133	216	67	149	162	50	112	180	53	127	267	97	170
1945	180	49	131	200	58	142	169	44	125	153	41	112	279	61	219
1946	143	31	112	152	38	115	125	24	101	133	28	105	226	43	183
1947	117	26	91	119	25	94	119	26	93	108	28	80	163	17	146
1948	102	24	78	106	21	85	94	21	73	92	25	67	173	37	136
1949	97	22	76	104	23	81	91	16	74	90	22	67	136	33	103
1950	87	21	66	90	21	69	82	24	57	76	16	60	155	41	114
1951	82	20	62	96	20	75	64	16	49	74	22	52	123	19	104
1952	72	16	56	69	12	57	67	15	52	78	18	60	78	26	52
1953	75	16	60	72	§	§	68	§	§	80	§	§	94	§	§

* Note :—The deaths shown for each year in this table are based on the method of classification in use at the time, the International List Numbers being as follows:—1921-30, Total = Nos. 143-150 (Sepsis = No. 146) of the 3rd Revision (1920) List; 1931-39, Total = Nos. 140-150 (Sepsis = Nos. 140, 145) of the 4th Revision (1929) List; 1940-49, Total = Nos. 140-150 (Sepsis = Nos. 140, 147) of the 5th Revision (1939) List; 1950-53, Total = Nos. 640-689 (Sepsis = Nos. 640, 641, 651, 681, 682, 684) of the 6th Revision (1948) List. Deaths due to criminal abortion are excluded from this table for years prior to 1940.

† The composition of the three English groups is as follows:—North of England: *Northern, East and West Ridings and North Western Regions*; Midlands and Eastern Regions: *North Midland, Midland and Eastern Regions*; South of England: *London and South Eastern, Southern and South Western Regions*.
‡ 1921-28, registered live births only; 1929-38, registered live and stillbirths; 1939-53, live and stillbirth occurrences.
§ Not available.

Table LIV(a).—Deaths of women certified as due to pregnancy and childbearing, by civil condition, age and cause, 1951

	Cause of death	All ages	Civil condition			Age							
			Single	Married	Widow- ed	15-	20-	25-	30-	35-	40-	45 and over	
640- 648	Complications of pregnancy	All Single Married Widowed	208 16 187 5	16 16 — —	187 — 187 —	5 — — 5	6 3 3 —	35 7 28 —	43 2 41 —	37 1 35 1	47 2 44 1	21 1 20 —	19 — 16 3
640	Pyelitis and pyelonephritis of pregnancy		6	—	6	—	2	1	1	—	2	—	—
641	Other infections of genito-urinary tract during pregnancy		1	—	1	—	—	1	—	—	—	—	—
642	Toxæmias of pregnancy		152	13	134	5	4	25	31	26	33	15	18
643	Placenta prævia		3	—	3	—	—	—	2	—	1	—	—
644	Other hæmorrhage of pregnancy		5	1	4	—	—	—	1	3	—	1	—
645	Ectopic pregnancy		22	2	20	—	—	6	5	2	6	3	—
646	Anæmia of pregnancy		5	—	5	—	—	1	1	3	—	—	—
647	Pregnancy with malposition of fœtus in uterus		—	—	—	—	—	—	—	—	—	—	—
648	Other complications arising from pregnancy		14	—	14	—	—	1	2	3	5	2	1
650- 652	Abortion	All Single Married Widowed	107 16 84 7	16 16 — —	84 — 84 —	7 — — 7	5 3 2 —	11 4 7 —	32 6 24 2	20 3 16 1	29 — 26* 3	9 — 8 1	1 — 1 —
650	Abortion without mention of sepsis or toxæmia		37	3	31	3	—	3	11	9	11	3	—
651	Abortion with sepsis		67	12	52	3	5	7	20	11	17	6	1
652	Abortion with toxæmia, without mention of sepsis		3	1	1	1	—	1	1	—	1	—	—
660	Delivery without complication		3	—	3	—	—	—	—	1	2	—	—
670- 678	Delivery with specified complication	All Single Married Widowed	161 6 153 2	6 6 — —	153 — 153 —	2 — — 2	3 — 3 —	28 — 28 —	37 2 35 —	30 2 28 —	46 2 43 1	13 — 13 —	4 — 3 1
670	Delivery complicated by placenta prævia or antepartum hæmorrhage		29	2	27	—	—	2	5	2	14	5	1
671	Delivery complicated by retained placenta		23	1	22	—	—	5	6	5	5	2	—
672	Delivery complicated by other post-partum hæmorrhage		31	—	31	—	2	2	9	7	7	2	2
673	Delivery complicated by abnormality of bony pelvis		6	—	6	—	—	—	1	1	2	2	—
674	Delivery complicated by disproportion or malposition of fœtus		10	—	10	—	—	3	2	2	3	—	—
675	Delivery complicated by prolonged labour of other origin		24	1	23	—	—	8	7	5	3	1	—
676	Delivery with laceration of perineum, without mention of other laceration		1	—	1	—	—	1	—	—	—	—	—
677	Delivery with other trauma		12	—	12	—	—	1	3	5	3	—	—
678	Delivery with other complications of childbirth		25	2	21	2	1	6	4	3	9	1	1
680- 689	Complications of the Puerperium	All Single Married Widowed	87 3 82 2	3 3 — —	82 — 82 —	2 — — 2	1 1 — —	12 2 10 —	23 — 23 —	22 — 22 —	18 — 18 —	7 — 7 —	4 — 2 2
680	Puerperal urinary infection without other sepsis		—	—	—	—	—	—	—	—	—	—	—
681	Sepsis of childbirth and the puerperium		13	1	10	2	—	2	3	2	3	—	3
682	Puerperal phlebitis and thrombosis		30	1	29	—	—	7	5	8	8	2	—
683	Pyrexia of unknown origin during the puerperium		2	—	2	—	—	—	—	2	—	—	—
684	Puerperal pulmonary embolism		19	—	19	—	—	2	8	5	2	2	—
685	Puerperal eclampsia		14	1	13	—	1	1	4	4	1	3	—
686	Other forms of puerperal toxæmia		2	—	2	—	—	—	—	1	1	—	—
687	Cerebral hæmorrhage in the puerperium		3	—	3	—	—	—	—	—	3	—	—
688	Other and unspecified complications of the puerperium		4	—	4	—	—	—	3	—	—	—	1
689	Mastitis and other disorders of lactation		—	—	—	—	—	—	—	—	—	—	—
640- 648 660- 689	Deliveries and Complications of pregnancy, childbirth and the puerperium (excluding abortion)	All Single Married Widowed	459 25 425 9	25 25 — —	425 — 425 —	9 — — 9	10 4 6 —	75 9 66 —	103 4 99 —	90 3 86 1	113 4 107 2	41 1 40 —	27 — 21 6
640- 689	Deliveries and Complications of pregnancy, childbirth and the puerperium (including abortion)	All Single Married Widowed	566 41 509 16	41 41 — —	509 — 509 —	16 — — 16	15 7 8 —	86 13 73 —	135 10 123 2	110 6 102 2	142 4 133* 5	50 1 48 1	28 — 22 6

* Includes one death of unstated civil condition.

Table LIV(b).—Deaths of women certified as due to pregnancy and childbearing, by civil condition, age and cause, 1952

	Cause of death	All ages	Civil condition			Age						
			Single	Married	Widowed	15–	20–	25–	30–	35–	40–	45 and over
640–648	Complications of pregnancy	All Single Married Widowed	181 8 167 6	8 8 167 —	167 — 6	4 2 2 —	19 — 19 —	42 — 42 —	40 1 38 1	37 3 33 1	27 2 24 1	12 — 9 3
640	Pyelitis and pyelonephritis of pregnancy		3	—	3	—	—	—	1	1	1	—
641	Other infections of genito-urinary tract during pregnancy		3	—	3	—	—	—	—	1	2	—
642	Toxæmias of pregnancy		131	6	121	4	3	14	29	31	28	16
643	Placenta prævia		1	—	1	—	—	—	1	—	—	—
644	Other hæmorrhage of pregnancy		4	—	3	1	—	—	1	1	2	—
645	Ectopic pregnancy		22	1	21	—	1	4	4	6	4	1
646	Anæmia of pregnancy		4	—	4	—	—	—	2	1	—	—
647	Pregnancy with malposition of fœtus in uterus		—	—	—	—	—	—	—	—	—	—
648	Other complications arising from pregnancy		13	1	11	1	—	1	5	—	3	3
650–652	Abortion	All Single Married Widowed	90 11 74 5	11 11 — —	74 — 74 —	5 — 5	— — —	15 4 11	21 3 17	20 2 14*	27 2 25	7 — 7
650	Abortion without mention of sepsis or toxæmia		31	5	24	2	—	8	6	5	9	3
651	Abortion with sepsis		47	5	40	2	—	4	13	12	16	2
652	Abortion with toxæmia, without mention of sepsis		12	1	10	1	—	3	2	3	2	—
660	Delivery without complication		6	—	6	—	—	—	1	—	4	1
670–678	Delivery with specified complication	All Single Married Widowed	130 5 124 1	5 5 — —	124 — 124 —	1 — 1	3 1 2	20 — 20	24 2 22	32 1 30	32 1 31	17 — 17
670	Delivery complicated by placenta prævia or antepartum hæmorrhage		15	—	15	—	—	—	3	4	5	3
671	Delivery complicated by retained placenta		15	1	14	—	1	3	2	4	4	1
672	Delivery complicated by other post-partum hæmorrhage		24	1	23	—	1	5	7	4	4	3
673	Delivery complicated by abnormality of bony pelvis		4	1	3	—	—	—	1	—	2	1
674	Delivery complicated by disproportion or malposition of fœtus		8	1	7	—	—	1	1	2	1	2
675	Delivery complicated by prolonged labour of other origin		20	—	20	—	—	4	3	4	6	3
676	Delivery with laceration of perineum, without mention of other laceration		—	—	—	—	—	—	—	—	—	—
677	Delivery with other trauma		18	1	16	1	1	1	2	6	6	1
678	Delivery with other complications of childbirth		26	—	26	—	—	6	5	8	4	3
680–689	Complications of the Puerperium	All Single Married Widowed	91 4 84 3	4 4 — —	84 — 84 —	3 — 3	3 1 2	17 — 16	22 — 22	28 3 24	15 — 15	2 — 2
680	Puerperal urinary infection without other sepsis		—	—	—	—	—	—	—	—	—	—
681	Sepsis of childbirth and the puerperium		4	—	3	1	—	2	1	1	—	—
682	Puerperal phlebitis and thrombosis		28	—	27	1	1	2	9	8	6	1
683	Pyrexia of unknown origin during the puerperium		—	—	—	—	—	—	—	—	—	—
684	Puerperal pulmonary embolism		25	3	22	—	1	5	3	10	5	1
685	Puerperal eclampsia		13	1	12	—	1	2	4	5	1	—
686	Other forms of puerperal toxæmia		3	—	3	—	—	2	1	—	—	—
687	Cerebral hæmorrhage in the puerperium		11	—	10	1	—	2	1	2	3	—
688	Other and unspecified complications of the puerperium		2	—	2	—	—	—	1	1	—	—
689	Mastitis and other disorders of lactation		5	—	5	—	—	2	2	1	—	—
640–648 660–689	Deliveries and Complications of pregnancy, childbirth and the puerperium (excluding abortion)	All Single Married Widowed	408 17 381 10	17 17 — —	381 — 381 —	10 — 10	10 4 6	56 — 55	89 2 87	100 5 92	84 4 79	50 2 47
640–689	Deliveries and Complications of pregnancy, childbirth and the puerperium (including abortion)	All Single Married Widowed	498 28 455 15	28 28 — —	455 — 455 —	15 — 15	10 4 6	71 4 66	110 5 104	120 7 106*	111 6 104	57 2 54

* Includes one death of unstated civil condition.

Table LIV(c).—Deaths of women certified as due to pregnancy and childbearing,
by civil condition, age and cause, 1953

	Cause of death	All ages	Civil condition			Age							
			Single	Married	Widow- ed	15-	20-	25-	30-	35-	40-	45 and over	
640- 648	Complications of pregnancy	All Single Married Widowed	211 13 197 1	13 13 — —	197 — 197 —	1 — — 1	4 1 3 —	24 2 22 —	46 2 44 —	60 3 56 1	44 4 40 —	25 1 24 —	8 — 8 —
640	Pyelitis and pyelonephritis of pregnancy		6	—	6	—	—	—	1	1	2	1	1
641	Other infections of genito-urinary tract during pregnancy		—	—	—	—	—	—	—	—	—	—	—
642	Toxæmias of pregnancy		154	9	145	—	4	18	36	38	33	18	7
643	Placenta prævia		—	—	—	—	—	—	—	—	—	—	—
644	Other hæmorrhage of pregnancy		6	—	6	—	—	—	2	1	2	1	—
645	Ectopic pregnancy		35	3	32	—	—	5	6	14	6	4	—
646	Anæmia of pregnancy		4	—	4	—	—	—	—	2	1	1	—
647	Pregnancy with malposition of fœtus in uterus		—	—	—	—	—	—	—	—	—	—	—
648	Other complications arising from pregnancy		6	1	4	1	—	1	1	4	—	—	—
650- 652	Abortion	All Single Married Widowed	76 15 59 2	15 15 — —	59 — 59 —	2 — — 2	4 2 2 —	16 8 8 —	20 2 18 —	19 2 15 2	11 1 10 —	6 — 6 —	— — — —
650	Abortion without mention of sepsis or toxæmia		30	7	21	2	1	6	7	12	3	1	—
651	Abortion with sepsis		39	7	32	—	2	9	11	6	7	4	—
652	Abortion with toxæmia, without mention of sepsis		7	1	6	—	1	1	2	1	1	1	—
660	Delivery without complication		5	—	5	—	—	—	1	1	—	1	2
670- 678	Delivery with specified complication	All Single Married Widowed	151 3 146 2	3 3 — —	146 — 146 —	2 — — 2	2 — 2 —	26 2 24 —	30 1 29 —	44 — 43 1	26 — 26 —	20 — 19 1	3 — 3 —
670	Delivery complicated by placenta prævia or antepartum hæmorrhage		33	1	32	—	—	4	7	10	5	7	—
671	Delivery complicated by retained placenta		27	—	26	1	—	8	8	4	5	2	—
672	Delivery complicated by other post-partum hæmorrhage		24	—	24	—	1	—	6	6	5	6	—
673	Delivery complicated by abnormality of bony pelvis		3	—	3	—	—	1	1	—	—	1	—
674	Delivery complicated by disproportion or malposition of fœtus		6	—	6	—	—	—	1	3	2	—	—
675	Delivery complicated by prolonged labour of other origin		24	1	23	—	—	3	5	10	3	1	2
676	Delivery with laceration of perineum, without mention of other laceration		—	—	—	—	—	—	—	—	—	—	—
677	Delivery with other trauma		13	—	13	—	—	3	2	3	2	2	1
678	Delivery with other complications of childbirth		21	1	19	1	1	7	—	8	4	1	—
680- 689	Complications of the Puerperium	All Single Married Widowed	84 6 78 —	6 6 — —	78 — 78 —	— — — —	3 1 2 —	16 2 14 —	21 1 20 —	19 — 19 —	18 2 16 —	5 — 5 —	2 — 2 —
680	Puerperal urinary infection without other sepsis		—	—	—	—	—	—	—	—	—	—	—
681	Sepsis of childbirth and the puerperium		14	3	11	—	1	3	3	4	1	1	1
682	Puerperal phlebitis and thrombosis		29	—	29	—	1	3	11	5	8	1	—
683	Pyrexia of unknown origin during the puerperium		1	—	1	—	—	—	—	—	—	1	—
684	Puerperal pulmonary embolism		22	2	20	—	—	6	3	6	5	2	—
685	Puerperal eclampsia		7	—	7	—	—	—	3	4	—	—	—
686	Other forms of puerperal toxæmia		5	—	5	—	1	1	—	—	2	—	1
687	Cerebral hæmorrhage in the puerperium		4	1	3	—	—	2	—	—	2	—	—
688	Other and unspecified complications of the puerperium		2	—	2	—	—	1	1	—	—	—	—
689	Mastitis and other disorders of lactation		—	—	—	—	—	—	—	—	—	—	—
640- 648 660- 689	Deliveries and Complications of pregnancy, childbirth and the puerperium (excluding abortion)	All Single Married Widowed	451 22 426 3	22 22 — —	426 — 426 —	3 — — 3	9 2 7 —	66 6 60 —	98 4 94 —	124 3 119 2	88 6 82 —	51 1 49 1	15 — 15 —
640- 689	Deliveries and Complications of pregnancy, childbirth and the puerperium (including abortion)	All Single Married Widowed	527 37 485 5	37 37 — —	485 — 485 —	5 — — 5	13 4 9 —	82 14 68 —	118 6 112 —	143 5 134 4	99 7 92 —	57 1 55 1	15 — 15 —

Table LV.—Deaths from maternal causes and death rates per 100,000 total (live and still) births in the period 1950-53 by cause and age

Int. Classn. (1948) No.	Cause of death	Deaths									Rates per 100,000 total (live and still) births			
		All ages	15-	20-	25-	30-	35-	40-	45 and over	All ages	15- 24	25- 34	35 and over	
640-689	All Maternal Causes ..	2,211	55	332	511	506	494	233	80	79	14	36	29	
647; 673-674	Disproportion, malposition and contracted pelvis ..	56	—	6	10	12	16	10	2	2	0	1	1	
675	Uterine inertia; other pro- longed labour	91	—	18	17	27	20	7	2	3	1	2	1	
676-678; 660	Shock; pelvic trauma, other and unspecified complica- tions of delivery ..	189	4	35	32	45	45	18	10	7	1	3	3	
671-672	Retained placenta and post- partum hæmorrhage ..	182	7	28	55	38	32	20	2	7	1	3	2	
682, 684	Thrombosis and embolism including pulmonary em- bolism	215	4	34	55	60	44	17	1	8	1	4	2	
640-641; 680-681	Sepsis and urinary infections	77	3	12	19	17	15	6	5	3	1	1	1	
645	Ectopic pregnancy	115	1	18	25	31	27	12	1	4	1	2	1	
651	Abortion with embolism, thrombosis or sepsis ..	217	12	33	56	44	52	19	1	8	2	4	3	
650	Abortion without mention of sepsis or toxæmia (including criminal) ..	130	3	22	33	32	29	10	1	5	1	2	1	
643-644; 670	Antepartum hæmorrhage including placenta prævia	140	—	10	33	30	43	23	1	5	0	2	2	
642; 685-686; 652	Toxæmias of pregnancy and the puerperium ..	695	21	103	154	145	150	74	48	25	4	11	10	
687	Cerebral hæmorrhage in the puerperium	24	—	4	1	3	9	4	3	1	0	0	1	
683; 688-689; } 646; 648 }	Remainder	80	—	9	21	22	12	13	3	3	0	2	1	

Table LVI.—Maternal mortality, distinguishing principal causes, and associated maternal mortality. Death rates per 1,000 total births, England and Wales, 1931 to 1953

MATERNAL MORTALITY (Complications of pregnancy, childbirth and puerperium, including abortion)										ASSOCIATED MATERNAL MORTALITY			Total attributed to, or associated with, maternal causes					
Year	Puerperal phlebitis and thrombosis and embolism	Puerperal sepsis	Antepartum hæmorrhage	Postpartum hæmorrhage	Toxæmia	Prolonged labour	Trauma, shock: other complication of delivery	Other causes	Total maternal causes other than abortion	Abortion				Total Maternal Mortality	Associated with maternal causes other than abortion	Associated with abortion	Total associated mortality	
										Criminal abortion		Spontaneous and other						
										With sepsis	Without mention of sepsis	With sepsis						Without mention of sepsis
I.S.C. Nos. (6th Revision)	682, 684	640, 641, 681	643, 644, 670	671, 672	642, 685, 686	673-675	676-678	Rem. 640-648 660-689	640-648 660-689	651-2	650-2 652-2	Rem. 651	Rem. 650, 652	650-652	640-689			
Int. List Nos. (5th Revision)	147c, 147d	147a, 147b	143, 146a, 146b	146c, 146d	144, 148	Rem. 142-150		142-150	142-150	140b	141b	Rem. 141	140, 141	140-150				
1931	0-33	1-08	0-50 0-52 0-51 0-49 0-47	0-75 0-80 0-84 0-86 0-78	0-75 0-80 0-84 0-86 0-78	0-77 0-80 0-88 0-86 0-81	0-72 0-72 0-78 0-73	3-43	3-43	0-08	0-04	0-35	0-21	0-68	4-11	1-27	0-12	1-38
1932	0-35	0-98						3-46	3-46	0-07	0-04	0-41	0-22	0-73	4-19	0-97	0-14	1-11
1933	0-34	1-15						3-72	3-72	0-09	0-05	0-42	0-24	0-80	4-52	1-21	0-16	1-37
1934	0-30	1-28						3-80	3-80	0-11	0-05	0-47	0-19	0-82	4-62	1-10	0-10	1-20
1935	0-31	1-04						3-41	3-41	0-10	0-05	0-42	0-17	0-74	4-15	1-02	0-12	1-14
1936	0-29	0-89	0-48 0-48 0-48	0-81 0-80 0-73	0-81 0-80 0-73	0-72 0-72 0-78 0-73	3-19	3-19	0-08	0-04	0-38	0-17	0-67	3-86	0-95	0-11	1-06	
1937	0-24	0-55					2-79	2-79	0-09	0-04	0-28	0-17	0-58	3-37	1-03	0-16	1-19	
1938	0-28	0-43					2-70	2-70	0-08	0-04	0-27	0-16	0-55	3-24	0-85	0-13	0-97	
1939	0-24	0-39					2-57	2-57	0-13	0-04	0-26	0-12	0-55	3-13	0-79	0-08	0-87	
1940	0-22	0-32	0-17	0-29	0-65	0-20	0-18	0-20	2-24	0-07	0-05	0-19	0-12	2-68	0-60	0-09	0-69	
1941	0-22	0-24	0-17	0-35	0-64	0-26	0-18	0-20	2-26	0-11	0-04	0-24	0-15	2-80	0-60	0-08	0-68	
1942	0-19	0-22	0-13	0-29	0-61	0-23	0-14	0-20	2-02	0-09	0-02	0-26	0-09	2-48	0-54	0-07	0-61	
1943	0-19	0-19	0-12	0-27	0-53	0-23	0-15	0-16	1-84	0-11	0-02	0-24	0-09	2-30	0-62	0-08	0-70	
1944	0-14	0-14	0-11	0-23	0-42	0-23	0-11	0-15	1-53	0-10	0-01	0-22	0-08	1-93	0-50	0-07	0-56	
1945	0-12	0-12	0-10	0-23	0-46	0-21	0-10	0-13	1-47	0-09	0-01	0-16	0-07	1-80	0-49	0-03	0-52	
1946	0-12	0-06	0-10	0-19	0-43	0-14	0-10	0-11	1-25	0-05	0-01	0-08	0-05	1-43	0-42	0-04	0-46	
1947	0-12	0-04	0-06	0-17	0-35	0-12	0-07	0-09	1-02	0-04	0-00	0-06	0-05	1-17	0-29	0-05	0-34	
1948	0-08	0-04	0-06	0-14	0-31	0-08	0-07	0-07	0-86	0-04	0-01	0-07	0-04	1-02	0-29	0-02	0-29	
1949	0-07	0-04	0-05	0-12	0-27	0-09	0-08	0-09	0-81	0-03	0-00	0-07	0-05	0-97	0-21	0-03	0-24	
1950	0-09	0-04	0-06	0-05	0-26	0-06	0-08	0-09	0-72	0-04	0-03	0-05	0-03	0-87	0-25	0-03	0-28	
1951	0-07	0-03	0-05	0-08	0-24	0-06	0-05	0-08	0-66	0-05	0-04	0-05	0-02	0-82	0-22	0-01	0-23	
1952	0-08	0-01	0-03	0-06	0-21	0-05	0-06	0-09	0-59	0-03	0-04	0-04	0-02	0-72	0-22	0-01	0-23	
1953	0-07	0-03	0-06	0-07	0-24	0-05	0-05	0-08	0-64	0-02	0-03	0-03	0-02	0-75	0-17	0-01	0-18	

Note:—Figures for 1931 to 1938 are based on live and stillbirth registrations, and from 1939 onwards on occurrences. Mortality from 1931 to 1939 is based on the 5th Revision of the International List, and from 1940 on the 6th Revision. Non-civilians are included throughout.

Table LVII(a).—Deaths of women not classed to pregnancy or childbearing but certified as associated therewith, 1951

Int. Classn. No. (6th Revision) to which assigned	Cause of death	All ages	15–	20–	25–	30–	35–	40–	45 and over	Percentage of all female deaths at ages 15–49
001–008 ..	Tuberculosis of respiratory system ..	5	—	3	—	1	1	—	—	0·2
010–019 ..	Tuberculosis, other forms	1	1	—	—	—	—	—	—	0·3
053.3 ..	Septicæmia B. coli	1	—	1	—	—	—	—	—	100·0
056 ..	Whooping cough	1	—	—	1	—	—	—	—	50·0
140–199 ..	Malignant neoplasms	7	—	—	1	1	2	2	1	0·1
214–217 ..	Benign neoplasm of female genital organs	8	—	—	1	1	1	4	1	7·0
241 ..	Asthma	3	—	—	—	2	—	1	—	0·8
252 ..	Thyrototoxicosis	1	—	—	—	—	1	—	—	1·4
260 ..	Diabetes mellitus	3	1	1	—	—	1	—	—	1·8
272 ..	Simmonds' disease	1	—	—	—	1	—	—	—	4·0
274 ..	Adrenal hæmorrhage	1	—	—	—	1	—	—	—	1·8
292 ..	Aplastic anæmia	2	—	—	—	1	1	—	—	5·3
330–334 ..	Vascular lesions affecting central nervous system	2	—	—	—	—	—	2	—	0·2
340.3 ..	Cerebrospinal meningitis (nonmeningo- coccal)	1	—	—	1	—	—	—	—	9·1
353 ..	Epilepsy	2	—	1	1	—	—	—	—	0·9
401 ..	Rheumatic fever with heart involvement ..	2	—	—	1	—	—	1	—	2·4
410 ..	Diseases of mitral valve	27	—	4	7	6	6	4	—	2·0
411 ..	Diseases of aortic valve specified as rheu- matic	1	—	—	1	—	—	—	—	4·5
414 ..	Endocarditis (valve unspecified) specified as rheumatic	3	—	1	—	1	1	—	—	1·7
415 ..	Other myocarditis specified as rheumatic ..	1	—	—	1	—	—	—	—	2·7
416 ..	Other heart disease specified as rheumatic ..	3	—	—	2	—	—	1	—	2·0
420.1 ..	Heart disease specified as involving coronary arteries	5	—	—	1	2	1	1	—	1·2
421 ..	Chronic endocarditis not specified as rheu- matic	2	—	—	1	—	1	—	—	2·9
422 ..	Other myocardial degeneration	8	—	—	2	1	—	1	4	2·7
430 ..	Acute and subacute endocarditis	2	—	1	1	—	—	—	—	2·6
433.1 ..	Auricular fibrillation	1	—	—	—	1	—	—	—	1·7
434 ..	Other and unspecified diseases of heart ..	4	—	—	2	1	1	—	—	4·3
440–443 ..	Hypertension with heart disease	4	—	—	1	—	—	1	2	1·8
444–447 ..	Hypertension without mention of heart disease	3	—	—	1	—	2	—	—	2·1
452 ..	Aneurysm except of heart and aorta	2	—	—	—	—	1	1	—	40·0
460 ..	Varicose veins of lower extremities	1	—	—	—	1	—	—	—	4·8
463 ..	Phlebitis and thrombophlebitis of lower extremities	1	—	—	1	—	—	—	—	3·8
466 ..	Other venous embolism and thrombosis ..	2	—	—	—	2	—	—	—	7·4
480–483 ..	Influenza	5	—	—	2	—	1	1	1	1·2
490 ..	Lobar pneumonia	7	—	1	3	3	—	—	—	3·6
491 ..	Bronchopneumonia	2	—	—	1	—	1	—	—	0·6
493 ..	Pneumonia unspecified	1	—	—	1	—	—	—	—	2·6
550–553 ..	Appendicitis	2	1	—	—	—	1	—	—	2·1
560.3 ..	Ventral hernia without mention of ob- struction	1	—	—	—	—	—	1	—	25·0
570 ..	Intestinal obstruction without mention of hernia	4	—	—	3	—	1	—	—	4·5
572 ..	Chronic enteritis and ulcerative colitis ..	2	—	—	2	—	—	—	—	1·4
576 ..	Peritonitis	1	—	—	—	1	—	—	—	7·7
581 ..	Cirrhosis of liver	1	—	—	1	—	—	—	—	1·2
585 ..	Cholecystitis without mention of calculi ..	1	—	—	1	—	—	—	—	4·0
590–594 ..	Nephritis	5	—	2	—	2	1	—	—	0·8
722.0 ..	Rheumatoid arthritis	1	—	—	—	—	—	1	—	5·9
749 ..	Hammer toe	1	—	—	—	—	—	1	—	50·0
750–759 ..	Congenital malformations	11	1	1	4	3	2	—	—	3·2
E800–E999	Violence	4	—	1	1	1	1	—	—	0·3
	Total	160	4	17	46	33	28	23	9	
	Single	5	2	—	1	—	—	1	1	
	Married	153	2	17	43	33	28	22	8	
	Widowed	2	—	—	2	—	—	—	—	
	Associated with abortion (included above) ..	9	—	2	3	3	—	1	—	
	Single	—	—	—	—	—	—	—	—	
	Married	9	—	2	3	3	—	1	—	
	Widowed	—	—	—	—	—	—	—	—	

Table LVII(b).—Deaths of women not classed to pregnancy or childbearing but certified as associated therewith, 1952*

Int. Classn. No. (6th Revision) to which assigned	Cause of death	All ages	15-	20-	25-	30-	35-	40-	45 and over	Percentage of all female deaths at ages 15-49
001-008 ..	Tuberculosis of respiratory system.. ..	4	—	2	1	—	1	—	—	0.2
010-019 ..	Tuberculosis, other forms	2	—	1	1	—	—	—	—	1.0
023 ..	Syphilitic aortitis	1	—	—	—	—	—	1	—	4.2
053.1 ..	Staphylococcal septicæmia	1	—	—	—	—	1	—	—	25.0
061 ..	Tetanus	1	—	1	—	—	—	—	—	20.0
072 ..	Leptospirosis icterohæmorrhagica	1	—	—	1	—	—	—	—	100.0
080 ..	Acute poliomyelitis	5	—	1	2	2	—	—	—	7.1
092 ..	Infectious hepatitis	2	—	—	1	1	—	—	—	3.8
140-199 ..	Malignant neoplasms	5	—	—	1	3	—	1	—	0.1
204 ..	Leukæmia and aleukæmia	2	—	—	1	1	—	—	—	0.9
214 ..	Uterine fibromyoma	7	—	—	—	—	4	1	2	10.6
270-277 ..	Diseases of other endocrine glands	7	—	1	—	4	1	—	1	8.4
290-299 ..	Diseases of blood and blood forming organs	2	—	—	—	1	1	—	—	1.4
330-334 ..	Vascular lesions affecting central nervous system	5	—	1	1	1	2	—	—	0.4
340.1 ..	Meningitis—pneumococcal	1	—	—	—	—	1	—	—	10.0
353.3 ..	Status epilepticus	1	—	—	—	—	—	1	—	0.9
391.2 ..	Otitis media	1	—	1	—	—	—	—	—	9.1
400-402 ..	Rheumatic fever	3	—	2	1	—	—	—	—	4.1
410 ..	Diseases of mitral valve	41	1	9	6	10	11	3	1	3.3
411 ..	Aortic stenosis specified as rheumatic	1	—	—	1	—	—	—	—	3.4
414 ..	Endocarditis (valve unspecified) specified as rheumatic	2	—	1	—	1	—	—	—	1.4
416 ..	Other heart disease specified as rheumatic..	5	—	—	4	1	—	—	—	4.1
420-1 ..	Heart disease specified as involving coronary arteries	5	—	—	—	1	3	—	1	1.2
422.2 ..	Myocardial degeneration	3	—	—	—	1	2	—	—	2.0
434.2 ..	Left ventricular failure	1	—	1	—	—	—	—	—	11.1
440-447 ..	Hypertensive disease.. ..	4	—	1	1	1	1	—	—	1.3
466 ..	Thrombosis of pelvic vein	1	—	—	—	—	—	—	1	2.6
471 ..	Acute suppurative frontal sinusitis.. ..	1	—	—	1	—	—	—	—	100.0
480 ..	Influenzal bronchopneumonia	1	—	—	—	—	—	1	—	1.6
490 ..	Lobar pneumonia	3	—	—	2	1	—	—	—	2.2
491 ..	Bronchopneumonia	5	—	1	2	1	1	—	—	1.7
493 ..	Pneumonia, other and unspecified	1	—	—	—	—	—	—	1	2.0
500-502 ..	Bronchitis	2	—	2	—	—	—	—	—	0.8
510-527 ..	Other diseases of respiratory system	5	—	—	2	1	1	1	—	2.5
540.1 ..	Perforated gastric ulcer	1	—	—	1	—	—	—	—	3.2
550.1 ..	Acute appendicitis with peritonitis	3	—	1	2	—	—	—	—	5.8
560.4 ..	Diaphragmatic hernia	1	1	—	—	—	—	—	—	25.0
570.3 ..	Volvulus	3	—	—	1	1	1	—	—	11.5
571.1 ..	Colitis	1	—	—	1	—	—	—	—	4.3
573.0 ..	Constipation	1	—	—	—	1	—	—	—	100.0
576 ..	Peritonitis	1	—	—	—	—	1	—	—	14.3
587.2 ..	Pancreatic cyst	1	—	—	1	—	—	—	—	25.0
592 ..	Chronic nephritis	3	—	—	1	1	1	—	—	0.7
606 ..	Vesicovaginal fistula	1	—	—	1	—	—	—	—	33.3
626 ..	Rectovaginal fistula	1	—	—	—	—	—	—	1	50.0
631 ..	Uterovaginal prolapse	3	—	—	—	—	—	—	3	13.0
730.1 ..	Chronic osteomyelitis	1	—	—	—	—	1	—	—	100.0
744.0 ..	Myasthenia gravis	1	—	—	1	—	—	—	—	10.0
754 ..	Congenital malformations of circulatory system	3	—	—	1	1	—	1	—	2.3
E800-E999	Violence	4	1	—	1	2	—	—	—	0.3
	Total	161	3	26	40	37	34	10	11	
	Single	5	—	1	4	—	—	—	—	
	Married	154	3	25	36	37	34	10	9	
	Widowed	2	—	—	—	—	—	—	2	
	Associated with abortion (included above) ..	8	—	—	1	2	3	2	—	
	Single	—	—	—	—	—	—	—	—	
	Married	8	—	—	1	2	3	2	—	
	Widowed	—	—	—	—	—	—	—	—	

Table LVII(c).—Deaths of women, not classed to pregnancy or childbearing, but certified as associated therewith, 1953

Int. Classn. No. (6th Revision) to which assigned	Cause or death	All ages	15-	20-	25-	30-	35-	40-	45 and over	Percentage of all female deaths at ages 15-49
001-008 ..	Tuberculosis of respiratory system	7	—	1	1	2	2	1	—	0.5
016 ..	Tuberculosis renal	1	1	—	—	—	—	—	—	2.1
080 ..	Acute anterior poliomyelitis with respiratory paralysis	1	—	—	—	1	—	—	—	1.5
092 ..	Infectious hepatitis	1	—	1	—	—	—	—	—	1.6
105 ..	Scrub typhus	1	—	1	—	—	—	—	—	100.0
140-199 ..	Malignant neoplasms	11	—	2	1	5	—	3	—	0.2
214 ..	Uterine fibroids	3	—	—	—	1	2	—	—	5.5
223 ..	Neurofibroma	1	—	—	1	—	—	—	—	1.4
241 ..	Status asthmaticus	1	—	—	1	—	—	—	—	0.3
260 ..	Diabetes mellitus	2	1	—	—	—	1	—	—	1.7
272 ..	Simmonds' disease	3	—	—	—	—	—	1	2	9.7
287 ..	Obesity	1	—	—	—	—	—	1	—	10.0
290-299 ..	Diseases of the blood and blood-forming organs	2	—	—	1	—	—	—	1	1.8
301 ..	Exhaustion due to mania	1	—	—	—	—	—	1	—	10.0
330-334 ..	Vascular lesions affecting central nervous system	6	—	2	3	—	—	—	1	1.5
353.2 ..	Status epilepticus	1	—	—	—	—	1	—	—	0.0
400-402 ..	Rheumatic fever	4	—	—	1	3	—	—	—	5.6
410 ..	Diseases of mitral valve	19	—	3	7	4	5	—	—	1.5
411 ..	Aortic disease specified as rheumatic	1	—	—	—	1	—	—	—	4.2
414 ..	Endocarditis (valve unspecified) specified as rheumatic	3	—	—	—	1	1	—	1	2.5
415 ..	Myocarditis specified as rheumatic	1	—	—	—	1	—	—	—	4.0
416 ..	Other heart disease specified as rheumatic	5	—	—	3	—	1	1	—	3.8
420.1 ..	Heart disease specified as involving coronary arteries	2	—	—	—	—	1	—	1	0.5
422.2 ..	Myocardial degeneration	3	—	—	—	—	2	1	—	1.8
430.0 ..	Subacute infective endocarditis	1	—	—	—	1	—	—	—	1.5
434.3 ..	Cor pulmonale	1	—	—	—	—	1	—	—	4.3
444 ..	Hypertension without mention of heart	1	—	—	—	—	—	1	—	1.6
445 ..	Malignant hypertension	1	—	—	—	—	1	—	—	1.0
451 ..	Rupture of aorta	1	—	—	—	—	—	1	—	5.6
465 ..	Pulmonary embolism	1	—	—	1	—	—	—	—	2.3
466 ..	Thrombosis femoral vein	1	—	1	—	—	—	—	—	2.8
480-483 ..	Influenza	5	1	1	2	1	—	—	—	2.2
490-493 ..	Pneumonia	5	—	1	2	1	1	—	—	1.1
518 ..	Pleurisy	1	—	—	—	—	—	1	—	8.3
526 ..	Bronchiectasis	1	—	—	—	1	—	—	—	0.9
544.1 ..	Dilatation of stomach	1	—	—	—	1	—	—	—	100.0
550.1 ..	Acute appendicitis with peritonitis	4	1	2	—	—	1	—	—	9.3
551 ..	Appendicitis N.O.S.	1	—	—	—	1	—	—	—	8.3
572.2 ..	Ulcerative colitis	1	—	1	—	—	—	—	—	0.8
584 ..	Gall stones	1	—	—	—	—	—	1	—	2.3
592 ..	Chronic nephritis	2	—	—	—	2	—	—	—	0.5
626 ..	Pelvic cellulitis	1	—	1	—	—	—	—	—	25.0
630-637 ..	Diseases of uterus and other female genital organs	5	—	—	1	—	1	—	3	7.2
750-759 ..	Congenital malformations	7	1	2	1	2	—	1	—	3.3
E800-E999	Violence	5	—	3	—	1	—	1	—	0.4
	Total	128	5	22	26	30	21	15	9	
	Single	9	3	2	2	1	1	—	—	
	Married	116	2	20	24	29	20	15	6	
	Widowed	3	—	—	—	—	—	—	3	
	Associated with abortion (included above)	7	—	3	2	2	—	—	—	
	Single	—	—	—	—	—	—	—	—	
	Married	7	—	3	2	2	—	—	—	
	Widowed	—	—	—	—	—	—	—	—	

TABLE LVIII.—Maternal mortality (including abortion). Death rates per 100,000 total live and stillbirths in standard regions, conurbations and urban/rural aggregates. England and Wales, 1950 to 1953

	1950	1951	1952	1953
ENGLAND AND WALES	87	82	72	75
Regional Summary:				
NORTHERN	104	97	69	76
Tyneside conurbation	118	115	102	86
Remainder of Northern	98	91	57	73
EAST AND WEST RIDINGS	91	89	71	59
West Yorkshire conurbation	87	79	69	46
Remainder of East and West Ridings	94	97	72	68
NORTH WESTERN	82	99	68	79
South East Lancashire conurbation	67	121	68	88
Merseyside conurbation	62	69	45	44
Remainder of North Western	109	96	84	93
NORTH MIDLAND	92	82	69	73
MIDLAND	90	64	69	69
West Midlands conurbation	78	70	79	64
Remainder of Midland	103	58	58	74
EASTERN	57	45	62	61
LONDON AND SOUTH EASTERN	71	71	72	81
Greater London	74	68	78	75
Remainder of South Eastern	61	79	52	100
SOUTHERN	54	73	71	84
SOUTH WESTERN	112	86	107	77
WALES (including Monmouthshire)	155	123	78	94
Aggregates Summary (by type of area)				
Conurbations	76	80	74	70
<i>Areas outside Conurbations:</i>				
Urban areas with populations of 100,000 and over	77	88	59	82
Urban areas with populations of 50,000 and under 100,000	73	80	67	64
Urban areas with populations under 50,000	110	76	79	80
Rural Districts	95	88	74	81

MENINGITIS AND ENCEPHALITIS

Classification

Within the Sixth Revision of the International Classification the principal rubrics to which the various forms of meningitis and encephalitis can be assigned are shown in Table LIX (page 115), which also indicates the number of deaths allocated to each of these rubrics in 1953.

No. 010 of the classification, tuberculosis of meninges and central nervous system, includes tuberculoma of brain, tuberculous abscess of brain, and tuberculous meningitis, the last being by far the most frequent. Under the existing rules of classification deaths are not assigned to Nos. 010-018, tuberculosis other than respiratory or disseminated, if pulmonary tuberculosis is mentioned, unless the condition in Nos. 010-018 was stated as the underlying cause or had a specified duration exceeding that of the lung affection. Deaths are not assigned to No. 019, disseminated tuberculosis (mainly miliary tuberculosis) if lung is mentioned or if tuberculosis of one site is shown as the underlying cause. Tuberculous meningitis is frequently associated with pulmonary or miliary tuberculosis, but, as the rules of selection indicate, much depends upon the way in which the cause of death certificate is completed in determining whether the death will or will not be assigned to No. 010, or to one of the other tuberculosis rubrics. A multiple cause analysis carried out on a sample of death certificates in 1951* showed that while 59 deaths were assigned to No. 010, tuberculosis of meninges and central nervous system, there were a further 33 certificates on which this site was reported as being involved, but the death was assigned elsewhere, presumably to another tuberculosis rubric. This small analysis suggests that fatal tuberculous involvement of the central nervous system occurs about half as often again as is indicated by the numbers of deaths actually so assigned.

No. 057 of the classification, meningococcal infections, comprises meningococcal meningitis (cerebrospinal fever), and various forms, acute and chronic, of meningococcaemia without there necessarily having been meningeal involvement. As Table LIX shows, a roughly equal number of deaths were assigned to each group.

Within No. 080 of the classification, acute poliomyelitis, the first sub-division 080.0 comprises bulbar poliomyelitis and polio-encephalitis. Out of a total of 320 deaths assigned to acute poliomyelitis in 1953, 154 (48 per cent) were specified as bulbar or polio-encephalitic. Late effects of poliomyelitis are included in No. 081, without distinction as to the original type of involvement. There were 18 deaths so assigned in 1953.

No. 082 of the classification, acute infectious encephalitis, is intended for the acute epidemic forms of encephalitis such as encephalitis lethargica, lymphocytic choriomeningitis, acute encephalomyelitis, and encephalitis of, for example, the St. Louis or the Vienna types. The category also includes "acute encephalitis" specified as such and without indication of underlying cause. Deaths resulting from acute encephalitis occurring as a complication of one of the common infections, such as measles, mumps or chickenpox, are automatically assigned to the underlying infectious disease and at present no separate count is made of such

*Statistical Review, 1951, Text Volume, Table, CXXIX, page 252.

cases. A special examination of the causes of the deaths assigned to No. 082 in 1952 showed that in this country the majority were described either as acute encephalitis or virus encephalitis, fairly often with pneumonia as a terminal or associated condition. Acute or virus meningo-encephalitis or encephalomyelitis was occasionally reported, but out of a total of 105 deaths in the year there were only five described as from encephalitis lethargica, one male aged 39 and four females, aged 23, 40, 48 and 70. In addition, the death of one woman aged 47 was attributed to epidemic encephalitis.

Deaths reported due to the late effects of conditions in No. 082 are assigned to No. 083, 'late effects', comprising those described as such and cases where the interval between onset of the disease and death was stated to be one year or more.

No. 340 of the classification comprises meningitis except meningococcal or tuberculous, and as Table LIX indicates, has four sub-divisions : 340.0 H. influenzae, 37 deaths in 1953 ; 340.1 Pneumococcus, 185 deaths ; 340.2 Other specified organism, 93 deaths, the organisms most frequently reported being B.coli, Friedlander bacillus, B. proteus, staphylococcus, and streptococcus ; and 340.3 Unspecified cause (i.e. with no organism specified as cause,) 99 deaths, the most usual descriptions being " pyogenic " or " purulent meningitis " or " of unknown ætiology." It is likely that a proportion of these deaths would more properly belong to No. 057 (meningococcal meningitis).

To No. 343 of the classification, encephalitis, myelitis and encephalomyelitis (except acute infectious), were assigned 115 deaths in 1953, and an examination of the certificates has shown that the three conditions included within the title of the rubric were reported in approximately equal numbers, often with pneumonia in association. Prior to the Sixth Revision of the Classification myelitis was classified separately from encephalitis, but now that the two conditions are included within the same rubric they can no longer normally be counted separately.

Trend of Mortality

Recent annual death rates from these various forms of meningitis and encephalitis are shown in Table LX (page 116). Mortality from tuberculous meningitis has paralleled mortality from tuberculosis as a whole (see page 136), and since 1946, and more particularly since 1948, there has been a very rapid reduction in numbers of deaths each year. The decline in mortality from meningococcal infection was striking and continuous up to 1948, but since then there has been no improvement. Mortality from polio-encephalitis has very distinctly followed the occurrences of the recent major epidemics, with pronounced peaks in the years 1947, 1949, and 1950. The rates for 1948 and 1951-53 have been lower, but still considerably higher than in years prior to 1947. The death rates from acute infective encephalitis show evidence of fairly steady decline throughout the fourteen year period covered, and have recently been only half what they were in 1940-41. In Table LX deaths from late effects of acute infective encephalitis are included. Numbers of deaths reported as from new cases or as late effects are distinguished below for years 1949 to 1953 :

	1949	1950	1951	1952	1953
No. 082, Acute	196	115	118	105	134
No. 083, Late effects	171	250	216	174	183
Total	367	365	334	279	317

The death rates from meningitis other than tuberculous or meningococcal, and from non-specific forms of encephalitis and myelitis have also declined fairly steadily since 1940 but with, in both cases, some arrest in the decline during the last three or four years, so resembling in recent trend the mortality from meningococcal meningitis and acute infective encephalitis.

Figures indicating the changing numbers of deaths at successive 10 year intervals from 1923 are shown in Table LXII (page 118). It has not been considered necessary for the purpose of this table to make fine adjustments for the different methods of classification used at each period, and the figures as shown are roughly comparable throughout.

Mortality from tuberculosis of meninges and C.N.S., from meningitis, except meningococcal and tuberculous, and from encephalitis, myelitis and encephalomyelitis shows a substantial decline at each period. Mortality from polio-encephalitis in 1953 was much higher than in previous periods reflecting the recent epidemic prevalence of the disease. Though deaths assigned to meningococcal meningitis and to acute infectious encephalitis increased between 1923 and 1933 there has subsequently been a considerable decline.

Sex and age distribution of deaths, 1953

Death rates by sex and age are shown in Table LXI (page 117). Mortality from tuberculous meningitis was equal in childhood in the two sexes, with slight male excess at adult ages. The highest death rates were at ages 1-4. Mortality from meningococcal meningitis was higher at most ages amongst males. The deaths were concentrated mainly at ages under 5. Mortality from polio-encephalitis showed a distinct male excess at each age; rates were highest at ages under 1 year, 1-4 and 5-14. Death rates from acute infectious encephalitis were higher among girls than boys up to the age of 5, but at higher ages there was a slight male excess. The higher rates for "acute" deaths were at ages under 5, whereas rates for "late effects" were highest at ages 65 and over. Mortality from the whole group "meningitis other than meningococcal or tuberculous" showed no sex difference during infancy but a male excess at higher ages. Rates were highest in infancy in each category.

The death rates from encephalitis and myelitis were on the whole higher in males than females.

Geographical variations in mortality

Numbers of deaths in 1951-53 and crude death rates per million living, from the three main types of meningitis are given in Table LXIV for standard regions and national population aggregates.

Mortality from tuberculous meningitis (see also Table LXXIV, page 137) was well above the national average in the Northern, North Western, and Midland Regions and in Wales. Rates were lowest in London and the South East. For meningococcal meningitis high rates were recorded in the Northern and (for males only) the North Western regions. The rate for Wales was the same as the national average, and the Southern regions had rates below the average. The Northern and North Western regions again had high mortality from meningitis of other forms, and so also had the East and West Ridings and Wales. Variations in mortality from this last group of meningitis was a feature of males only. The female rates varied little from region to region.

In relation to the several types of area, mortality from tuberculous meningitis was highest in the conurbations (excluding Greater London) and generally high in the urban areas. Lower rates were recorded in the rural districts, and lowest of all in Greater London. Variations by type of area were similar in respect of mortality from meningococcal meningitis, with the rate in the conurbations (excluding Greater London) much higher than those of the rural districts. The conurbations (excluding Greater London) again gave the highest mortality from other forms of meningitis, but there were negligible differences in the rates between the other urban areas and rural districts.

Notification arrangements and statistics

Under arrangements that came into operation on 1st January, 1950, polio-encephalitis ceased to be notifiable as a condition distinct from poliomyelitis, and since then no notification figures for the two forms of the disease have been separately available. Under the new regulations, however, poliomyelitis (including polioencephalitis) had to be reported either as paralytic or non-paralytic.

For notification of "encephalitis lethargica" there was substituted, at the same date, notification of acute encephalitis under one or other of the two heads "infective encephalitis" (comprising the conditions classified to No. 082 of the International Classification) and "post-infectious infectious encephalitis" (comprising the forms of encephalitis associated with the common infections).

Cerebrospinal fever and meningococcal meningitis continued to be notifiable, but the heading was extended to include fulminating or chronic cases without meningitis and the International Classification title "meningococcal infections" was adopted.

Tuberculous meningitis is notifiable in the same way as other forms of tuberculosis, but up to the end of 1953 nationally compiled statistics did not distinguish this form from the large group of non-respiratory tuberculosis as a whole. Under arrangements introduced at the beginning of 1954 notifications of tuberculosis are transmitted weekly and quarterly by Medical Officers of Health to the Registrar General, as in the case of other notifiable infectious diseases, and tuberculosis of the meninges and central nervous system is now distinguished in the published notification statistics.

Table LXIII (page 118) gives mean annual notification rates (corrected) for 1950-53, by sex and age, for meningococcal infection and the two groups of acute encephalitis, with, for comparison, similar figures for tuberculous meningitis for 1954.

**Table LIX.—Deaths from Infections of the central nervous system by sex,
England and Wales, 1953**

Int. Classn. No. (6th Revision)	Cause of death	Male	Female
010	Tuberculosis of meninges and central nervous system	177	168
057	Meningococcal infections	166	125
057·0	Meningococcal meningitis	96	59
057·1	Acute and unspecified meningococcaemia	69	65
057·2	Chronic meningococcaemia	—	—
057·3	Other forms of meningococcal infections	1	1
080·0	Acute poliomyelitis, specified as bulbar or polio- encephalitis	102	52
082	Acute infectious encephalitis	70	64
083	Late effects of acute infectious encephalitis	99	84
340	Meningitis, except meningococcal and tuberculous	230	184
340·0	H. Influenzæ	25	12
340·1	Pneumococcus	101	84
340·2	Due to other specified organism	48	45
340·3	Unspecified cause	56	43
343	Encephalitis, myelitis and encephalomyelitis (except acute infectious)	69	46

Table LX.—Infections of the central nervous system: Crude death rates per million living. England and Wales, 1940 to 1953
(Excluding non-civilian males from 1st January, 1940, and non-civilian females from 1st June, 1941, to 1949 inclusive).

Int. Classn. No. (6th Revision)	Cause of death	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
010	Tuberculosis of meninges and central nervous system..	46	60	50	50	46	46	39	37	31	25	20	20	12	8
057	Meningococcal infections	62	53	30	20	15	14	12	13	7	7	6	7	7	7
080.0	Acute poliomyelitis specified as bulbar or polio- encephalitis*	1	1	1	1	1	1	1	5	2	6	6	2	3	3
082, 083	Acute infectious encephalitis (including late effects) ..	19	19	16	14	12	13	11	11	9	9	8	8	6	7
340	Meningitis, except meningococcal and tuberculous ..	20	20	19	17	17	15	12	13	10	11	9	9	8	9
343	Encephalitis, myelitis and encephalomyelitis (except acute infectious)	9	8	7	7	6	6	5	5	4	5	4	3	3	3

* Polio-encephalitis only for 1940 to 1948 inclusive. Corresponding figure for 1949 would be 5.

Table LXI.—Infections of the central nervous system: Death rates per million living* by sex and age. England and Wales, 1953
(Rates based on less than ten deaths are shown in *italics*)

Int. Classn. No. (6th Revision)	Cause of death	0—	1—	5—	15—	45—	65 and over	All ages
010	Tuberculosis of meninges and central nervous system	26 21	50 55	9 10	6 5	3 2	0 0	8 7
057	Meningococcal infections	210 147	41 35	4 3	1 1	2 1	1 2	8 5
080·0	Acute poliomyelitis specified as bulbar or polio- encephalitis	9 3	14 4	11 5	4 3	1 1	0 —	5 2
082	Acute infectious encephalitis	34 45	9 11	2 2	3 2	2 1	1 —	3 3
083	Late effects of acute infectious encephalitis	— —	1 —	0 —	3 3	9 6	13 8	5 4
340	Meningitis, except meningococcal and tuberculous	236 238	23 11	4 2	2 2	11 7	15 10	11 8
340·0	H. Influenzæ	26 21	9 4	— —	— —	0 —	0 —	1 1
340·1	Pneumococcus	91 90	6 5	2 1	1 0	6 4	7 6	5 4
340·2	Due to other specified organism	74 84	4 2	1 1	0 1	2 1	1 1	2 2
340·3	Unspecified cause	45 42	3 —	1 1	1 1	2 2	6 3	3 2
343	Encephalitis, myelitis, and encephalomyelitis (except acute infectious)	14 6	7 3	2 3	1 1	5 2	7 3	3 2

* Death rates under 1 year are per million live birth occurrences.

Table LXII.—Deaths from certain infections of the central nervous system in 1923, 1933, 1943 and 1953, England and Wales

Int. Classn. No. (6th Revision)	Cause of death	1923	1933	1943	1953
010	Tuberculosis of meninges and central nervous system	3,256	2,143	1,948	345
057	Meningococcal infections	284	942	780	291
080·0	Acute poliomyelitis specified as bulbar or polio-encephalitis	40	67	27	154
082, 083	Acute infectious encephalitis (including late effects)	531	815	495	317
340	Meningitis, except meningococcal and tuberculous	2,068	1,005	694	414
343	Encephalitis, myelitis and encephalomyelitis (except acute infectious)	526	433	283	115

Note : The deaths for each year are assigned according to the classification in use at the time.

Table LXIII.—Mean annual notification rates per million living, by sex and age : Meningococcal infections and Acute encephalitis, 1950-53 ; Tuberculosis of meninges and central nervous system, 1954

		All ages	0–	5–	15–	45–	65 and over
Meningococcal infections	{ M	35	240	49	12	6	2
	{ F	25	180	39	9	6	2
Acute encephalitis							
	Infective	{ M	5	16	10	3	0·5
		{ F	3	11	6	3	0·3
	Post infectious ..	{ M	3	7	8	1	0·3
		{ F	2	6	6	1	0·1
Tuberculosis of meninges and central nervous system	{ M	15	61	34	10	4	0·5
	{ F	16	67	33	14	3	3

The notifications on which these rates are based exclude those of unknown age.

Table LXIV.—Deaths from Tuberculous meningitis, Meningococcal meningitis and Meningitis of other or unspecified cause, and crude annual average death rates per million living, in England and Wales and each standard region and population aggregate by type of area, 1950-53

Area				Tuberculosis of meninges and central nervous system (I.S.C. No. 010)		Meningococcal infections (I.S.C. No. 057)		Meningitis, except meningococcal and tuberculous (I.S.C. No. 340)	
				Deaths	Rate	Deaths	Rate	Deaths	Rate
ENGLAND AND WALES .. {				M 882	14	482	8	654	10
				F 856	12	397	6	497	7
Standard Regions :									
Northern {				M 85	18	62	13	57	12
				F 88	18	53	11	39	8
East and West Ridings .. {				M 83	14	50	8	72	12
				F 78	12	31	5	45	7
North Western {				M 178	20	101	11	116	13
				F 168	16	61	6	81	8
North Midland {				M 67	13	33	7	49	10
				F 63	12	24	5	41	8
Midland {				M 118	18	50	8	67	10
				F 116	17	55	8	50	7
Eastern {				M 48	10	22	5	43	9
				F 31	6	28	6	35	7
London and South Eastern .. {				M 131	9	84	5	136	9
				F 144	8	85	5	105	6
Southern {				M 48	12	28	7	36	9
				F 28	7	20	5	37	9
South Western {				M 46	10	21	5	30	7
				F 49	10	17	4	35	7
Wales (including Monmouthshire) {				M 78	20	31	8	48	13
				F 91	23	23	6	29	7
Aggregates summary (by type of area)									
Conurbations {				M 327	14	218	9	256	11
				F 349	13	175	7	191	7
Greater London {				M 86	7	78	7	102	9
				F 115	9	70	5	84	6
Conurbations excluding Greater London {				M 241	20	140	12	154	13
				F 234	17	105	8	107	8
Areas outside conurbations :									
Urban areas with populations of 100,000 and over .. {				M 125	15	62	7	91	11
				F 116	13	53	6	78	9
Urban areas with populations of 50,000 and under 100,000 {				M 76	16	36	8	44	9
				F 71	13	31	6	35	7
Urban areas with populations under 50,000 {				M 204	15	89	7	138	10
				F 171	12	73	5	100	7
Rural Districts {				M 150	12	77	6	125	10
				F 149	12	65	5	93	7

TUBERCULOSIS

In 1953, 5,447 males and 2,466 females died of respiratory tuberculosis and 517 males and 472 females of tuberculosis of other sites. Compared with 1949, the male deaths from respiratory tuberculosis were a little more than half and the female deaths rather more than a third. The proportion per 1,000 male deaths from respiratory tuberculosis in which occupational disease of the lungs was mentioned increased during the period 1949 to 1953 as follows :—

1949	1950	1951	1952	1953
25	29	36	45	55

This apparent increase was due more to the decrease in deaths from respiratory tuberculosis than to the actual increase in numbers of cases with occupational disease i.e. from 262 in 1949 to 298 in 1953. The decrease in deaths from non-respiratory tuberculosis since 1949 is particularly marked for the meninges and central nervous system, in which both male and female deaths have decreased by 68 per cent.

Table LXV (page 128) shows the trends in Comparative Mortality Indices since 1931. The indices for various sites at five-yearly intervals, expressed in terms of the 1933 indices, were as follows :—

	All forms		Respiratory		Meninges and C.N.S.		Intestines, peritoneum		Bones and joints		Other forms	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1933	100	100	100	100	100	100	100	100	100	100	100	100
1938	78	75	78	74	83	85	67	58	68	66	84	91
1943	98	73	103	71	93	97	68	56	84	65	96	89
1948	64	61	67	63	53	59	30	30	37	43	59	62
1953	29	19	30	20	15	15	10	8	12	17	26	28

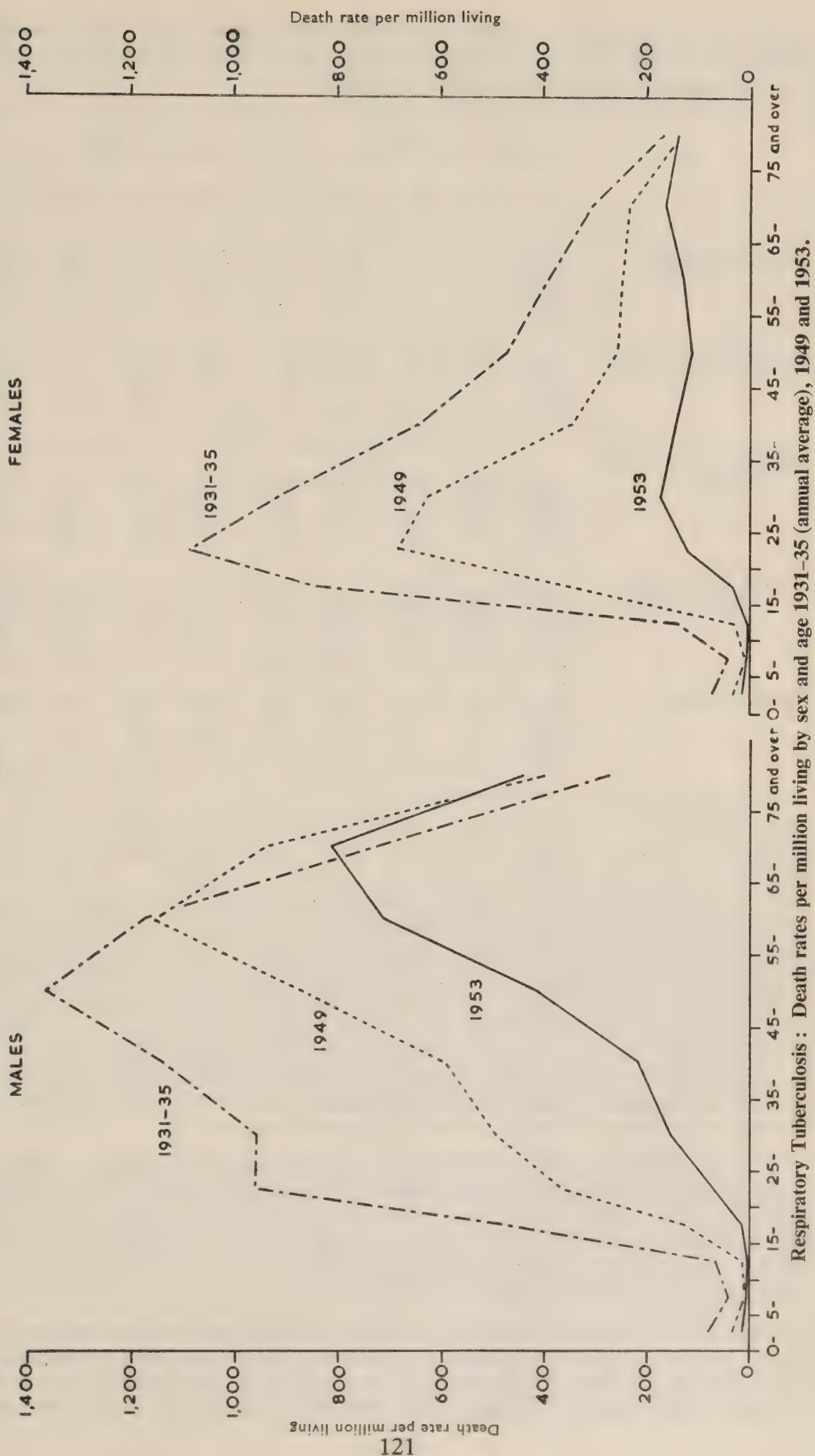
The most striking improvement has occurred in mortality from tuberculosis of the intestines and peritoneum, the indices for which in 1953 were only 10 and 8 per cent for males and females respectively of what they had been twenty years previously.

Respiratory tuberculosis

Table LXVII (page 129) shows the notification rates per 100,000 living for respiratory tuberculosis. Rates in 1953 were lower than in the preceding year for males under 45 and for females under 35. For men aged 65 and over the rates increased from 77 in 1952 to 85 in 1953, the highest notification rate in this age-group during 1938 to 1953. Rates for women aged 15-24 were considerably in excess of male rates, this position being reversed at ages 35 and over.

Serial death rates from respiratory tuberculosis from 1931 onwards are shown in Table LXVIII (page 130). Diagram 2 (page 121) compares the age-specific rates in 1931-35, 1949 and 1953. Among men the falling off in rates has been particularly marked in the younger age-groups and the maximum rates have shifted from the age-group 45-54 in 1931-35 to ages 55-64 in 1949 and 65-74 in 1953. There has been a corresponding decrease in the deaths rates among younger women and the maximum rate occurred at ages 25-34 in 1953 compared with 20-24 in 1931-35 and in 1949.

Diagram 2



Respiratory Tuberculosis : Death rates per million living by sex and age 1931-35 (annual average), 1949 and 1953.

Table LXIX (page 131) compares death rates of four age-groups in urban areas and rural districts at four periods during 1931 to 1953. The rates expressed as percentages of those in 1931 were as follows :—

		Males				Females			
		15–	25–	45–	65 and over	15–	25–	45–	65 and over
England and Wales	1931	100	100	100	100	100	100	100	100
	1938	64	67	81	89	71	68	66	71
	1947	52	53	77	99	66	63	50	60
	1953	5	15	37	107	7	18	24	48
London Admin. County	1931	100	100	100	100	100	100	100	100
	1938	86	75	87	93	81	93	72	89
	1947	51	55	77	113	66	68	64	68
	1953	5	11	33	96	5	15	19	39
Remainder of Greater London	1931	100	100	100	100	100	100	100	100
	1938	76	71	75	78	92	70	67	88
	1947	40	47	72	127	67	65	53	54
	1953	—	15	33	141	5	18	25	76
Urban areas outside Greater London	1931	100	100	100	100	100	100	100	100
	1938	64	66	80	91	73	69	66	67
	1947	55	54	78	94	68	65	48	60
	1953	7	16	38	104	8	18	24	47
Rural Districts	1931	100	100	100	100	100	100	100	100
	1938	64	67	88	90	67	61	67	75
	1947	52	56	83	98	56	52	49	57
	1953	5	15	46	117	6	17	27	49

The reduction in the death rates in all four types of areal aggregates at ages 15-24 was striking. At ages 25-44 the death rates had decreased by more than 80 per cent, the decline being similar for men and women. At ages 45-64 rates for women showed an earlier and greater decrease than those for men. At ages 65 and over, women's rates decreased over the twenty-two year period, except in Greater London outside the Administrative County where there was an increase in 1953 compared with 1947. Male rates, however, after being lower in 1938 than in 1931, showed an upward trend by 1947 in each aggregate of areas, and this continued in 1953 except for London Administrative County. In 1931, 1938 and 1947 the highest male rates for the country as a whole occurred in the age-group 45-64, but owing to the greater decrease in rates in this age-group, by 1953 the maximum rates affected men aged 65 and over. However, even in this last group there has been a decline in mortality since 1951.

In Table LXX (page 132) notification rates for standard regions are shown. Rates were generally high for both males and females in Wales. The Northern region had the highest notification rates for both boys and girls of 5-14. The fact that the rates were highest for both young men and women aged 15-24 in almost every region emphasises the special risk to which these young persons are subjected when they leave school and start work.

Table LXVI (page 128) shows the equivalent annual notification rates at ages 15-44 and the numbers of deaths in the regions per 100 fresh notifications. Since the deaths are not necessarily related to the notifications, this is not a true case fatality rate. In so far as new notifications add to the reservoir

of cases while deaths subtract from it, this ratio is a measure of the partial clearance of cases ; of the other factor, cures, we have no information. While the sex differences are slight at ages under 65, at 65 and over there is more variation, the male ratio considerably exceeding the female in the North Midland and Southern regions and in Wales, while the female ratio was in excess in the Northern, North Western and South Western regions.

The death rates per million living in the conurbations, regions, urban areas with populations of various sizes and rural districts are shown in Table LXXI (page 133). At ages 15 and over, death rates in rural districts were generally lower than in the three types of urban areas outside the conurbations. Of the conurbations, Merseyside had the highest overall death rates from respiratory tuberculosis for both sexes. The following table compares the tuberculosis mortality rates per million living with those for some other causes of death :—

Conurbation	Respiratory tuberculosis		Cancer of lung, bronchus and pleura		Chronic rheumatic heart disease		Congenital malformations		Suicide	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Tyneside	318	159	699	106	167	285	159	115	147	60
West Yorkshire	265	86	662	89	162	301	111	78	151	94
S. E. Lancashire	294	120	731	116	205	299	105	90	172	74
Merseyside	380	184	793	138	114	272	137	134	120	65
West Midlands	336	129	667	90	137	243	109	89	147	83
Greater London	270	99	795	131	178	256	97	81	143	84

Rank correlation coefficients between the death rates from respiratory tuberculosis and the other conditions were as follows :—

Cancer of lung, bronchus and pleura	Males +0.2	Females +0.5
Chronic rheumatic heart disease	—0.6	—0.37
Congenital malformations	+0.43	+0.94
Suicide	—0.5	—0.89

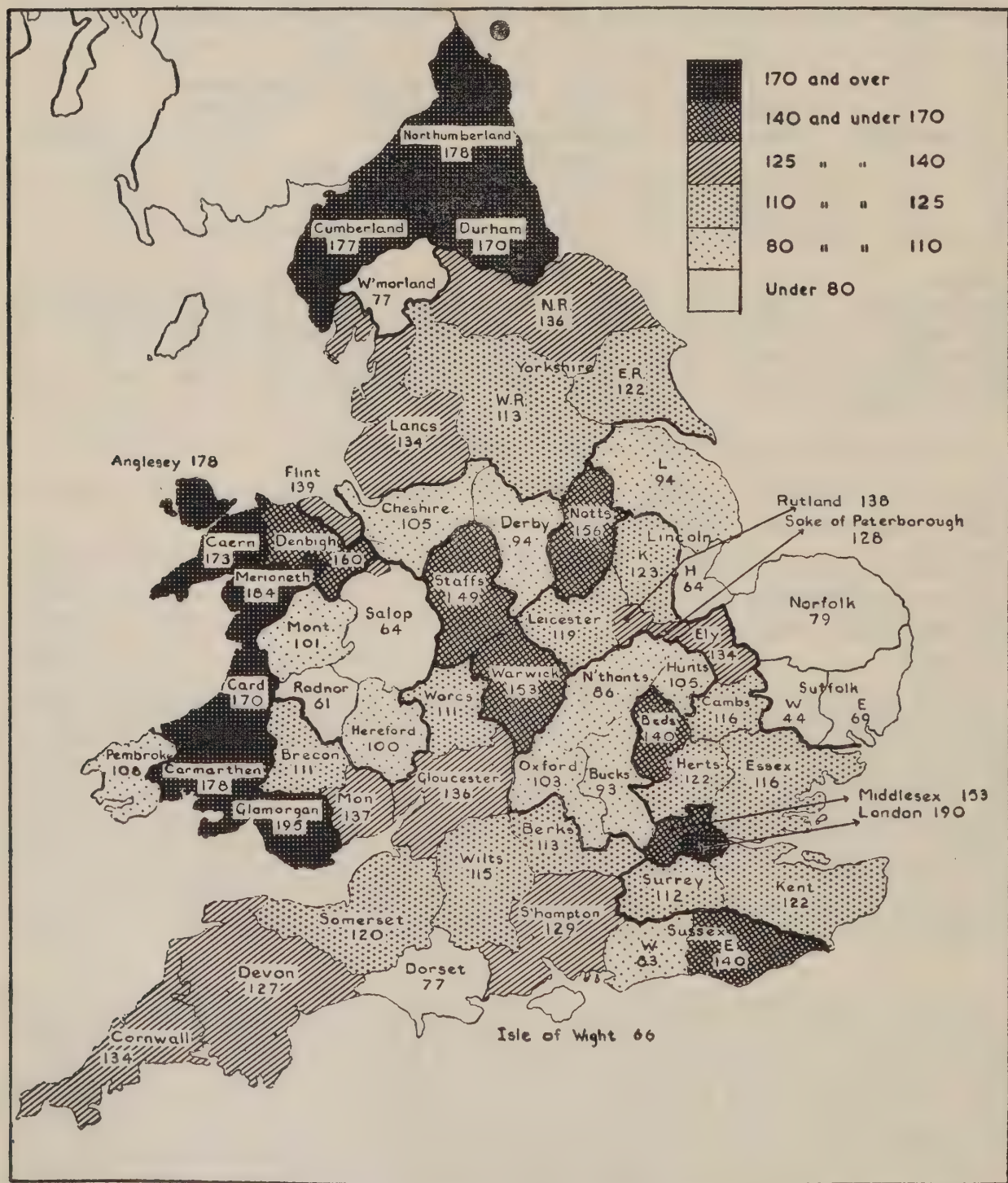
Rural districts in the South of England had lower death rates for men of 15 to 44 and for women aged 25 and over than had those of the North, the Midlands and Eastern Regions or Wales. Among elderly men of 65 and over, the rates in urban areas with 100,000 or more population in the North of England were considerably lower (736) than in the other parts of the country (Midlands and Eastern Regions 952; South 914; Wales 926). Young women of 15-24 in this aggregate of areas had the excessive mortality rate of 172 compared with 77 in the Midlands and Eastern Regions, 83 in the South and 93 in Wales.

Table LXXII (page 135) shows the equivalent average notification and death rates at ages 15-44. Four of the English counties with county boroughs—Northumberland, Cumberland, Durham and Nottinghamshire—and London—had notification rates in excess of any of those in counties without county boroughs. Diagram 3 (page 124) shows that the E.A.N. rates were heavy in the western parts of Wales, except Pembrokeshire, in the three northern counties of Northumberland, Cumberland and Durham, in a midland group composed of Staffordshire, Warwickshire and Nottinghamshire, and in London and Middlesex. Isolated counties with high average notification rates were Denbighshire, Bedfordshire and East Sussex. Diagram 4 (page 125) shows that death rates were also high in parts of the west of Wales, the three northern counties, in

a midlands group consisting of the counties of Staffordshire, Leicestershire, Nottinghamshire and Lincolnshire (Kesteven). Despite the high notification rate in East Sussex the death rate was relatively low.

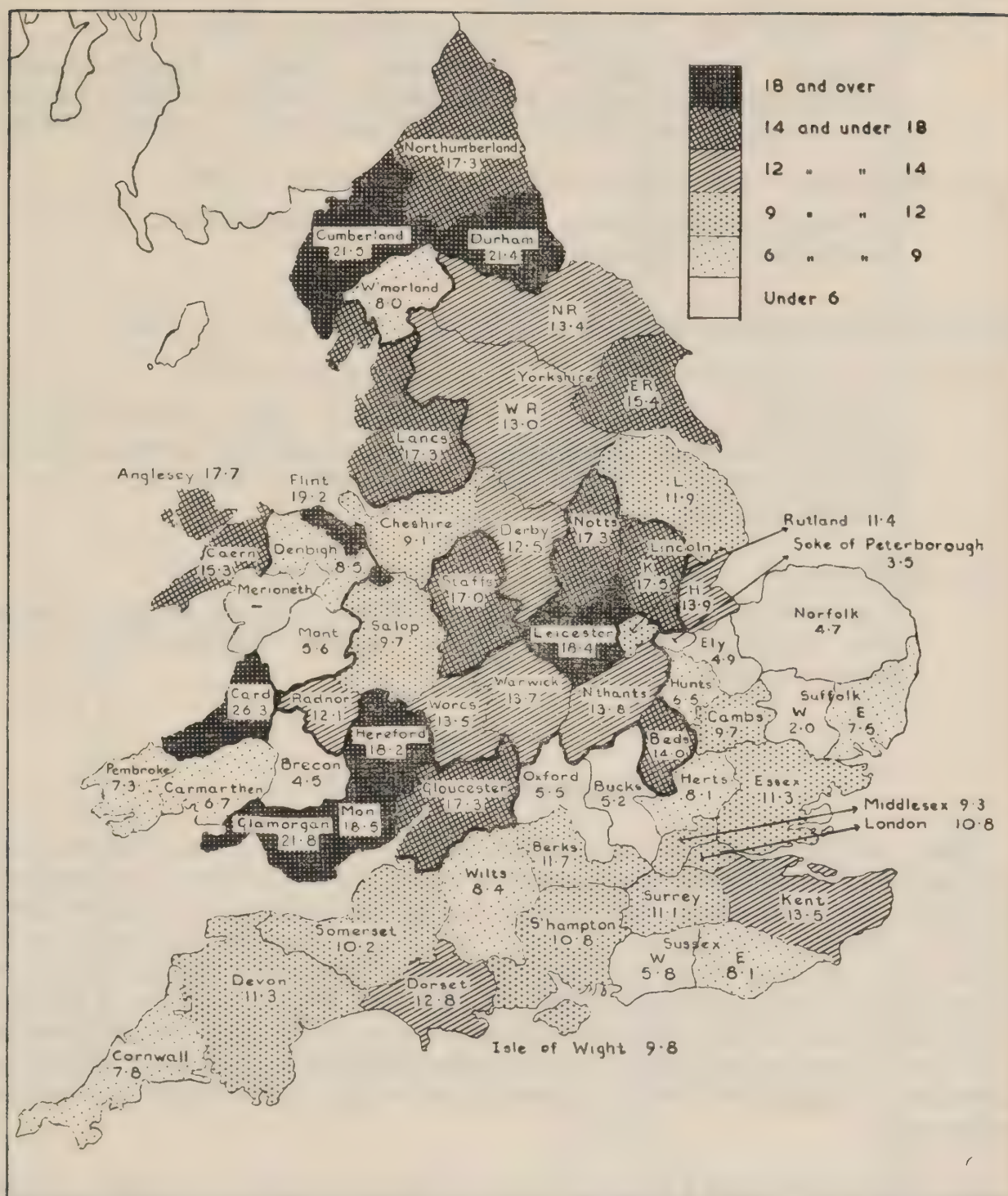
There has been a remarkable decline in death rates from respiratory tuberculosis in recent years, accompanied in some counties by a decrease, though much smaller, in the notification rates, and in others by an increase. These changes may be summarised as follows (equivalent average rates at ages 15-44) :

Diagram 3



Respiratory Tuberculosis: Equivalent Average Notification Rate per 100,000 living of persons aged 15-44, 1953.

Diagram 4



Respiratory Tuberculosis: Equivalent Average Death Rate per million living of persons aged 15-44, 1953.

(1) Notification rates in 1953 more than in 1949 :—

(a) death rates in 1953, 25 per cent or more of those in 1949—

Cardiganshire, Cumberland, Durham, Hertfordshire, Lincolnshire
(Kesteven), Rutland;

(b) death rates in 1953 less than 25 per cent of those in 1949—

Carmarthenshire, Cornwall, Huntingdonshire, Isle of Ely, Merionethshire, Pembrokeshire, Soke of Peterborough, Sussex East, Warwickshire.

(2) Notification rates in 1953 up to 15 per cent less than in 1949 :—

(a) death rates in 1953, 25 per cent or more of those in 1949—

Anglesey, Cambridgeshire, Derbyshire, Dorset, Glamorganshire, Herefordshire, Lancashire, Leicestershire, Nottinghamshire, Radnorshire, Southampton, Staffordshire, Worcestershire, Yorkshire (W.R.);

(b) death rates in 1953, less than 25 per cent of those in 1949—

Cheshire, Denbighshire, Flintshire, Northumberland, Shropshire, Westmorland, Yorkshire (N.R.).

(3) Notification rates in 1953, less than 85 per cent of those in 1949 :—

(a) death rates in 1953, 25 per cent or more of those in 1949—

Bedfordshire, Berkshire, Caernarvonshire, Essex, Gloucestershire, Kent, Lincolnshire (Holland), London, Middlesex, Monmouthshire, Northamptonshire, Oxfordshire, Somerset, Suffolk East, Surrey, Yorkshire (E.R.);

(b) death rates in 1953, less than 25 per cent of those in 1949—

Brecknockshire, Buckinghamshire, Devon, Isle of Wight, Lincolnshire (Lindsey), Montgomeryshire, Norfolk, Suffolk West, Sussex West, Wiltshire.

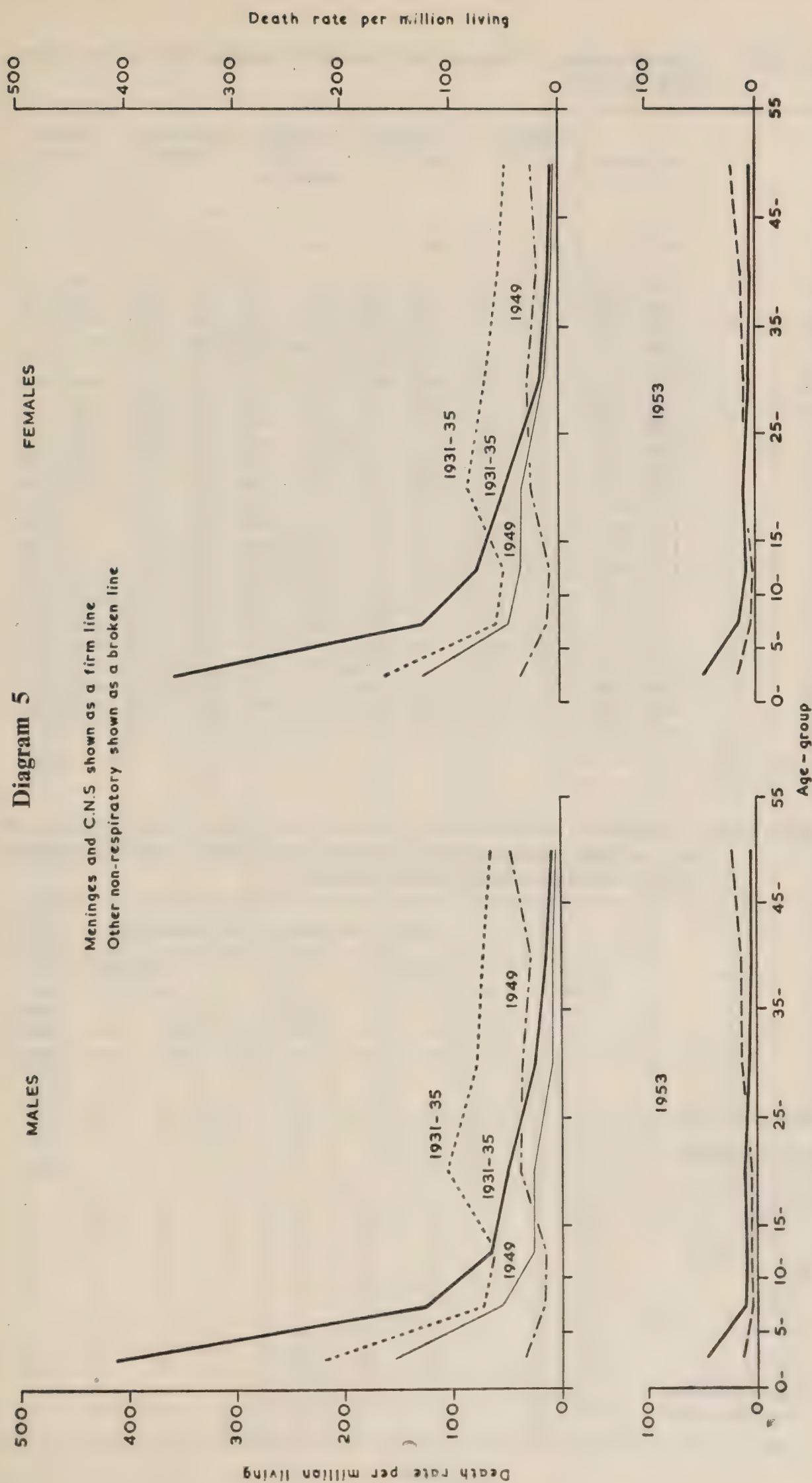
Non-respiratory tuberculosis

Table LXXIII (page 136) shows death rates from tuberculosis of the meninges and central nervous system and from other non-respiratory forms of tuberculosis. The greatest improvement in the former rates has occurred in children under 5 where between 1931-35 and 1953 the rate has decreased by 89 per cent for boys and 87 per cent for girls. Diagram 5 (page 127) shows the general pattern of decrease in the rates between 1931-35, 1949 and 1953. Whereas death rates from tuberculosis of the meninges have in most years decreased with increasing age, those from tuberculosis of other non-respiratory sites have undergone considerable age-redistribution in recent years, with a shift of mortality towards higher ages.

In Table LXXIV (page 137) the rates are shown in the standard regions, in urban areas with populations of varying sizes and in rural districts. Among girls under 5 in Wales, the death rate from tuberculous meningitis was 141, nearly $5\frac{1}{2}$ times the rate of 26 in the London and South Eastern region, and more than double the rate of 67 for boys under 5 in Wales.

FEMALES

Meninges and C.N.S shown as a firm line
Other non-respiratory shown as a broken line



Non-respiratory Tuberculosis: Death rates per million living by sex and age 1931-35 (annual average), 1949 and 1953.

Table LXV.—Tuberculosis : Comparative Mortality Indices for various sites, 1931 to 1953

			All forms		Respira- tory		Meninges and C.N.S.		Intestines, perito- neum, etc.		Bones and joints		Other forms	
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1931	...	...	1.39	1.47	1.38	1.47	1.44	1.39	1.75	1.91	1.53	1.72	1.24	1.23
1932	...	...	1.30	1.38	1.27	1.36	1.38	1.28	1.78	1.65	1.45	1.88	1.28	1.34
1933	...	...	1.29	1.34	1.29	1.35	1.21	1.18	1.50	1.72	1.46	1.52	1.19	1.10
1934	...	...	1.20	1.24	1.19	1.24	1.22	1.22	1.34	1.45	1.41	1.56	1.07	1.12
1935	...	...	1.13	1.16	1.13	1.18	1.10	1.01	1.23	1.31	1.29	1.39	0.97	0.98
1936	...	...	1.09	1.10	1.09	1.11	1.06	1.00	1.08	1.23	1.21	1.33	1.02	0.95
1937	...	...	1.08	1.12	1.08	1.12	1.04	1.02	1.19	1.09	1.12	1.24	1.04	1.12
1938	...	...	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1939	...	...	1.01	0.99	1.02	1.00	0.92	0.93	0.96	0.92	1.05	1.14	0.98	0.93
1940	...	...	1.18	1.08	1.22	1.09	1.06	1.07	1.09	1.05	1.10	0.99	0.92	1.05
1941	...	...	1.28	1.11	1.36	1.09	1.42	1.37	1.27	1.00	1.03	1.11	1.32	1.12
1942	...	...	1.19	0.99	1.27	0.97	1.20	1.13	1.27	1.08	1.30	1.06	1.13	0.99
1943	...	...	1.26	0.98	1.33	0.96	1.13	1.14	1.02	0.96	1.22	0.99	1.14	0.98
1944	...	...	1.21	0.92	1.27	0.91	1.05	1.02	0.97	0.81	1.05	0.94	1.11	1.00
1945	...	...	1.17	0.92	1.23	0.91	1.01	1.04	0.93	0.71	1.01	0.81	1.08	0.92
1946	...	...	0.94	0.86	0.97	0.86	0.88	0.89	0.69	0.53	0.69	0.80	0.81	0.86
1947	...	...	0.90	0.89	0.93	0.92	0.81	0.81	0.56	0.62	0.58	0.66	0.83	0.86
1948	...	...	0.83	0.82	0.87	0.85	0.64	0.70	0.45	0.51	0.54	0.65	0.70	0.68
1949	...	...	0.76	0.72	0.80	0.77	0.55	0.56	0.39	0.37	0.39	0.48	0.64	0.49
1950	...	...	0.62	0.55	0.66	0.58	0.42	0.48	0.23	0.25	0.38	0.39	0.47	0.44
1951	...	...	0.55	0.45	0.58	0.46	0.43	0.46	0.21	0.24	0.29	0.35	0.43	0.39
1952	...	...	0.44	0.31	0.47	0.32	0.26	0.26	0.17	0.16	0.28	0.26	0.37	0.32
1953	..	..	0.37	0.26	0.39	0.27	0.18	0.18	0.15	0.14	0.17	0.26	0.31	0.31

Table LXVI.—Respiratory tuberculosis : Ratio of deaths per 100 notifications by sex and age, and equivalent average notification rates for persons aged 15-44, in Standard Regions, 1953

Area	E.A.N.R. 15-44	Ratio of deaths per 100 notifications							
		Males				Females			
		15-	25-	45-	65 & over	15-	25-	45-	65 & over
England and Wales	137	3	15	38	82	4	15	36	85
Standard Regions:									
Northern	170	5	15	33	83	4	20	35	124
East and West Ridings	118	4	17	39	77	4	18	39	79
North Western ..	132	2	19	44	80	5	20	45	103
North Midland ..	118	5	22	44	109	5	18	44	87
Midland	141	4	15	44	85	5	16	37	87
Eastern	101	2	13	40	76	2	14	35	79
London and South Eastern	151	1	11	32	74	2	11	30	75
Southern	114	3	13	33	85	2	11	28	54
South Western ..	127	3	15	40	105	4	12	37	115
Wales (including Monmouthshire)	171	3	16	48	94	4	15	30	85

Table LXVII.—Respiratory tuberculosis : Notification rates per 100,000 living by sex and age, 1938 to 1953

		All ages	0–	5–	15–	25–	35–	45–	65 and over
Males									
1938	...	108	20	42	141	137	136	136	52
1939	...	98	17	32	132	124	124	125	46
1940	...	104	17	29	145	146	128	123	43
1941	...	115	20	33	154	155	148	141	50
1942	...	117	22	38	165	148	153	142	49
1943	...	119	27	40	166	144	154	152	50
1944	...	122	30	41	180	158	142	149	56
1945	...	118	32	40	178	160	135	142	53
1946	...	119	32	46	179	174	125	138	54
1947	...	118	40	53	193	163	116	137	56
1948	...	117	44	51	215	161	117	139	64
1949	...	119	46	49	180	159	122	146	68
1950	...	111	53	49	159	154	107	135	67
1951	...	115	53	48	170	156	117	141	72
1952	...	112	52	51	165	147	116	135	77
1953	..	110	49	49	155	133	114	139	85
Females									
1938	...	77	18	42	175	129	72	42	19
1939	...	71	15	33	166	116	68	37	18
1940	...	70	17	30	168	120	66	35	16
1941	...	76	19	33	185	126	69	41	19
1942	...	78	20	34	204	130	70	37	18
1943	...	83	26	40	209	142	73	40	18
1944	...	86	26	40	227	150	75	38	16
1945	...	81	26	41	223	140	69	34	16
1946	...	80	28	49	213	141	65	35	16
1947	...	83	33	51	235	146	66	35	17
1948	...	86	46	58	244	151	68	35	17
1949	...	85	44	53	238	155	71	35	17
1950	...	82	43	52	238	152	69	31	16
1951	...	81	50	52	229	149	68	33	16
1952	...	80	49	53	216	148	71	35	16
1953	..	77	45	52	201	141	73	34	18

Table LXVIII.—Respiratory tuberculosis : Death rates per million living by sex and age, 1931-45 and 1946 to 1953

	0-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over
Males											
1931-35	85	42	64	490	963	961	1,140	1,368	1,176	723	275
1936-40	61	20	44	366	742	785	937	1,210	1,216	718	296
1941-45	76	24	34	339	581	674	811	1,114	1,203	741	295
1946	68	22	23	239	481	615	687	1,020	1,165	768	340
1947	77	15	29	241	500	632	679	1,034	1,213	812	267
1948	56	10	14	211	445	603	633	961	1,166	881	334
1949	33	6	13	127	368	496	591	869	1,153	927	380
1949*	34	7	14	127	366	497	592	869	1,159	937	400
1950*	38	9	8	78	229	395	428	751	1,024	891	411
1951*	30	7	7	46	171	292	364	636	978	953	464
1952*	15	4	10	35	102	201	287	503	829	843	447
1953*	14	4	3	18	71	156	214	413	712	814	445
Females											
1931-35	74	43	143	840	1,138	911	646	475	394	306	170
1936-40	55	24	98	658	1,016	759	511	377	339	272	160
1941-45	72	24	76	591	916	692	427	304	269	220	123
1946	60	25	69	468	842	662	382	261	242	207	119
1947	70	24	63	502	899	730	411	267	249	224	133
1948	52	19	53	462	812	702	367	255	235	218	105
1949	33	9	30	349	684	622	348	253	245	229	127
1949*	33	10	30	351	682	622	348	254	249	236	139
1950*	29	8	15	199	429	444	273	229	212	212	144
1951*	25	8	14	108	278	347	238	192	180	198	135
1952*	18	5	6	58	169	230	166	131	148	150	159
1953*	17	5	3	32	122	174	146	116	130	162	140

* According to the 6th (1948) Revision of the International List. Throughout the rest of the table rates are according to the 5th (1938) Revision.

Table LXIX.—Respiratory tuberculosis : Death rates per million living by sex and age in England and Wales, London Administrative County, Remainder of Greater London, other Urban areas, and Rural Districts

		Males				Females			
		15–	25–	45–	65 and over	15–	25–	45–	65 and over
England & Wales	1931	843	1,219	1,431	654	1,098	902	515	320
	1938	539	814	1,153	583	782	614	338	226
	1947	438	649	1,104	647	721	569	257	191
	1953	45	185	535	698	78	160	122	155
London Admin. County	1931	945	1,383	2,083	1,159	1,122	881	603	428
	1938	812	1,041	1,821	1,079	904	817	435	382
	1947	483	754	1,605	1,304	743	600	388	293
	1953	50	147	693	1,118	52	133	115	167
Remainder of Greater London	1931	812	1,090	1,274	598	823	748	424	259
	1938	615	775	950	468	755	522	282	229
	1947	321	517	923	761	554	489	226	139
	1953	—	167	415	843	41	131	108	197
Urban areas out- side Greater London	1931	911	1,318	1,551	686	1,179	950	546	327
	1938	585	870	1,243	621	856	660	362	219
	1947	497	708	1,210	642	802	617	263	197
	1953	60	210	584	714	92	175	130	154
Rural Districts	1931	576	870	802	394	956	843	410	271
	1938	368	585	704	356	641	513	276	203
	1947	302	490	666	385	534	440	200	154
	1953	28	130	369	461	59	141	111	133

Table LXX.—Respiratory tuberculosis : Notification rates per 100,000 living by sex and age in Standard Regions, 1953

Area	Males							Females							Persons
	0–	5–	15–	25–	45–	65 and over	All ages	0–	5–	15–	25–	45–	65 and over	All ages	
England and Wales	49	49	155	124	139	85	110	45	52	201	107	34	18	77	93
Standard Regions :															
Northern ..	48	64	180	141	166	72	125	34	74	273	140	44	16	102	114
East and West Ridings	60	41	129	114	130	89	101	44	34	170	88	26	15	62	81
North Western ..	58	55	160	109	141	88	108	49	58	214	98	31	15	75	91
North Midland ..	40	46	158	98	110	56	92	37	58	175	89	32	18	68	80
Midland ..	66	58	154	128	161	83	119	69	67	211	112	40	15	87	102
Eastern.. ..	31	37	121	94	91	58	79	35	30	143	78	28	20	55	67
London and South Eastern ..	49	46	190	143	154	114	126	48	48	201	117	36	22	80	102
Southern ..	38	37	101	114	115	77	91	39	43	147	106	31	20	67	79
South Western ..	32	48	126	126	119	54	97	21	37	189	100	35	14	67	82
Wales (including Monmouthshire) ..	44	49	196	144	154	98	125	49	73	256	145	48	24	102	114

Table LXXI.—Respiratory tuberculosis : Death rates per million living by sex and age and notifications per 100 deaths in Standard Regions and Urban/Rural Aggregates within Regional Groups, 1953

Area	Males						Females						Persons		
	0—	5—	15—	25—	45—	65 and over	All ages	0—	5—	15—	25—	45—	65 and over	All ages	All ages per hundred deaths
ENGLAND AND WALES	14	4	45	185	535	698	257	17	4	78	160	122	155	108	517
Aggregates summary (by type of area)															
Conurbations :	15	2	44	189	619	849	293	14	5	82	167	131	165	115	?
Areas outside conurbations :															
Urban areas with populations of 100,000 and over	8	7	85	252	629	874	322	22	—	109	170	137	188	122	?
Urban areas with populations of 50,000 and under 100,000	23	—	50	191	519	606	249	16	4	58	161	112	148	102	?
Urban areas with populations under 50,000	16	7	43	181	461	640	237	20	4	71	156	112	145	102	?
Rural Districts	12	3	28	130	369	461	171	16	5	59	141	111	133	93	?
NORTH OF ENGLAND															
Regions :															
Northern	15	8	84	212	540	596	256	8	—	114	275	154	198	152	560
East and West Ridings	12	6	52	190	505	681	254	13	3	69	156	102	115	94	473
North Western	12	—	39	209	614	698	285	8	2	116	192	138	157	125	452
Conurbations :															
Tyneside	28	—	100	210	753	667	318	—	—	100	317	159	146	159	?
West Yorkshire	—	—	48	209	522	605	265	16	—	48	137	97	108	86	?
South East Lancashire	11	—	33	194	654	703	294	—	—	80	164	161	169	120	?
Merseyside	32	—	111	289	863	1,038	380	—	9	202	324	177	195	184	?
Areas outside conurbations :															
Urban areas with populations of 100,000 and over	—	8	94	284	613	736	319	15	—	172	152	99	203	115	?
Urban areas with populations of 50,000 and under 100,000	—	—	32	190	470	714	245	24	—	55	192	89	159	105	?
Urban areas with populations under 50,000	18	9	32	179	461	525	225	19	—	68	217	139	119	121	?
Rural Districts	14	7	40	120	354	582	176	—	8	98	174	118	153	109	?

Table LXXI.—continued.

Area	Males						All ages	Females				Persons					
	0-	5-	15-	25-	45-	65 and over		0-	5-	15-	25-	45-	65 and over	All ages	All ages	Notifica- tions per hundred deaths	
MIDLANDS AND EASTERN																	
Regions :																	
North Midland ..	14	4	75	218	484	608	249	—	—	95	160	142	156	111	179	446	
Midland ..	22	3	56	191	700	711	287	34	9	105	175	146	130	118	201	509	
Eastern ..	16	4	23	119	360	441	169	8	4	25	111	96	160	81	124	541	
Conurbation :																	
West Midlands ..	22	5	70	223	844	762	336	22	11	148	182	169	114	129	229	?	
Areas outside conurbations :																	
Urban areas with populations of 100,000 and over ..	12	7	83	201	657	952	316	13	—	77	168	160	181	121	214	?	
Urban areas with populations of 50,000 and under 100,000 ..	22	—	87	165	541	507	235	—	—	66	167	117	115	99	165	?	
Urban areas with populations under 50,000 ..	18	5	44	177	448	654	231	10	5	67	120	92	151	86	156	?	
Rural Districts ..	17	—	24	140	305	287	143	26	4	44	142	118	158	96	120	?	
GREATER LONDON ..	13	2	21	159	521	959	270	21	5	46	132	111	184	99	179	597	
SOUTH OF ENGLAND																	
Regions :																	
Remainder of South Eastern ..	21	—	39	183	370	577	213	33	5	44	111	99	116	82	143	581 492	
Southern ..	19	—	35	146	380	662	198	20	—	34	117	87	109	75	135		
South Western ..	—	9	41	187	479	568	233	18	5	85	124	128	165	103	166		
Urban areas with populations of 100,000 and over ..																	
Urban areas with populations of 50,000 and under 100,000 ..	50	—	30	219	528	595	265	26	13	56	116	128	167	102	177	?	
Urban areas with populations under 50,000 ..	9	5	51	163	365	623	212	29	—	51	99	105	140	84	144	?	
Rural Districts ..	9	4	23	115	351	438	158	9	5	45	111	80	92	70	114	?	
WALES (including Monmouthshire)																	
Urban area with population of 100,000 and over ..	19	10	61	234	731	921	351	30	10	107	218	147	206	140	244	467	
Urban area with population of 50,000 and under 100,000 ..	38	22	142	305	815	926	399	40	—	93	228	173	264	154	270	?	
Urban areas with populations under 50,000 ..	—	—	—	250	882	435	317	—	—	—	341	116	—	127	217	?	
Rural Districts ..	22	11	44	237	710	914	345	23	24	138	238	109	209	142	242	?	
	—	—	35	173	685	962	325	35	—	82	169	184	172	127	227	?	

Table LXXII.—Respiratory tuberculosis : Notifications, deaths and equivalent average rates per 100,000 living at ages 15-44 and ratios of deaths to notifications in Counties with and without County Boroughs, 1953

Counties, (in order of Notification rate at ages 15-44)	Notifi- cation rate E.A.N.R. 15-44	No. of Notifications				No. of Deaths		Death rate E.A.D.R. 15-44	Deaths per 100 Notifi- cations 15-44
		Males		Females		Males 15-44	Females 15-44		
		15-	25-44	15-	25-44				
English counties without county boroughs :									
Middlesex	153	236	464	307	457	50	48	9.3	7
Bedfordshire	140	34	71	38	50	15	5	14.0	10
Rutland	138	3	3	3	4	—	1	11.4	8
Cornwall	134	33	52	52	52	6	5	7.8	6
Ely, Isle of	134	6	10	14	23	1	1	4.9	4
Peterborough, Soke of	128	8	6	8	10	1	—	3.5	3
Lincolnshire, Kesteven	123	13	18	18	20	5	5	17.5	14
Hertfordshire	122	49	98	77	89	9	13	8.1	7
Cambridgeshire	116	22	25	14	24	4	3	9.7	8
Wiltshire	115	28	81	47	50	7	7	8.4	7
Huntingdonshire	105	11	12	5	4	—	2	6.5	6
Herefordshire	100	14	17	6	12	5	4	18.2	18
Buckinghamshire	93	33	56	28	45	3	6	5.2	6
Sussex, West	83	13	34	17	35	6	1	5.8	7
Dorset	77	26	30	20	23	9	7	12.8	16
Westmorland	77	3	7	6	4	1	1	8.0	10
Wight, Isle of	66	4	9	2	10	3	1	9.8	16
Lincolnshire, Holland	64	2	6	8	11	2	4	13.9	22
Shropshire	64	16	25	16	26	6	6	9.7	14
Suffolk, West	44	4	7	4	9	1	—	2.0	4
London and English counties with county boroughs:									
<i>Northern</i>									
Northumberland	178	106	160	151	177	26	34	17.3	10
Cumberland	177	23	66	57	74	12	15	21.5	12
Durham	170	210	292	303	270	60	77	21.4	13
Yorkshire, N. Riding	136	44	103	84	86	13	18	13.4	10
Lancashire	134	478	817	742	786	177	206	17.3	14
Yorkshire, E. Riding	122	52	76	73	65	14	20	15.4	13
Yorkshire, W. Riding	113	246	593	373	461	110	91	13.0	12
Cheshire	105	91	161	138	144	25	25	9.1	9
<i>Other</i>									
London	190	420	997	564	835	86	85	10.8	6
Nottinghamshire	156	119	167	129	150	37	28	17.3	12
Warwickshire	153	203	410	281	349	59	59	13.7	9
Staffordshire	149	170	348	249	289	63	61	17.0	12
Sussex, East	140	68	109	62	68	9	10	8.1	6
Gloucestershire	136	84	174	120	140	37	31	17.3	13
Southampton	129	114	226	147	212	29	28	10.8	8
Devon	127	83	119	94	112	20	17	11.3	9
Kent	122	139	254	164	231	50	41	13.5	12
Leicestershire	119	73	91	69	85	31	20	18.4	16
Essex	116	179	343	200	276	47	58	11.3	11
Berkshire	113	33	69	29	74	13	8	11.7	10
Surrey	112	140	229	169	183	45	32	11.1	11
Worcestershire	111	37	79	71	70	14	18	13.5	12
Somerset	110	47	93	45	64	16	8	10.2	10
Oxfordshire	103	24	41	30	43	6	1	5.5	5
Derbyshire	94	68	108	63	86	28	17	12.5	14
Lincolnshire, Lindsey	94	32	66	59	40	9	16	11.9	13
Northamptonshire	86	25	30	35	31	13	8	13.8	17
Norfolk	79	43	54	49	39	6	5	4.7	6
Suffolk, East	69	13	27	25	26	9	1	7.5	11
Welsh counties :									
Glamorganshire	195	172	278	231	298	56	59	21.8	12
Merionethshire	184	5	10	4	10	—	—	—	—
Anglesey	178	4	10	10	9	1	2	17.7	9
Carmarthenshire	178	23	42	28	34	1	4	6.7	4
Caernarvonshire	173	17	22	20	21	5	2	15.3	9
Cardiganshire	170	9	9	5	11	4	2	26.3	18
Denbighshire	160	17	36	28	30	2	4	8.5	5
Flintshire	139	12	31	12	32	6	6	19.2	14
Monmouthshire	137	39	61	75	56	18	15	18.5	14
Brecknockshire	111	3	9	6	8	1	—	4.5	4
Pembrokeshire	108	14	11	7	13	1	2	7.3	7
Montgomeryshire	101	5	3	4	6	—	1	5.6	6
Radnorshire	61	1	1	—	3	—	1	12.1	20

Table LXXIII.—Tuberculosis of meninges and central nervous system, and other non-respiratory tuberculosis : Death rates per million living by sex and age, 1931-53

		Tuberculosis of meninges and central nervous system						Other non-respiratory tuberculosis					
		0-	5-	10-	15-	25-54 E.A.D.R.	55 and over	0-	5-	10-	15-	25-54 E.A.D.R.	55 and over
		Males						Males					
1931-35	..	414	123	66	49	13	3	219	71	61	105	71	75
1936	..	313	129	60	42	11	3	152	52	42	92	66	61
1937	..	319	91	66	42	13	2	168	55	43	79	71	60
1938	..	297	96	57	42	13	3	156	45	39	87	61	52
1939	..	284	90	52	38	12	4	125	53	34	89	63	60
1940	..	300	96	55	48	13	3	146	41	35	89	65	62
1941	..	402	136	67	55	14	4	188	46	43	91	60	59
1942	..	321	107	67	53	14	2	134	50	46	84	65	59
1943	..	288	110	55	50	12	5	134	42	36	73	56	54
1944	..	273	102	62	51	12	2	109	34	34	67	51	59
1945	..	266	100	65	47	11	2	107	38	35	67	53	49
1946	..	222	86	72	42	11	3	87	21	27	51	50	43
1947	..	215	83	53	39	11	4	92	33	25	46	45	44
1948	..	179	62	33	30	9	4	57	25	16	41	41	44
1949	..	153	54	25	26	7	4	34	15	14	38	37	38
1950	..	103	40	24	20	8	4	24	8	12	25	28	38
1951	..	109	37	22	19	7	5	17	5	6	19	26	34
1952	..	67	16	14	13	5	4	19	1	6	14	20	38
1953	..	46	10	8	10	3	2	12	3	6	7	17	30
		Females						Females					
1931-35	..	356	125	73	48	10	2	160	59	50	84	58	62
1936	..	283	98	58	47	9	2	129	37	38	66	51	45
1937	..	291	89	61	50	9	1	132	46	43	72	48	52
1938	..	300	100	60	40	8	2	112	40	36	73	45	42
1939	..	252	77	66	47	9	2	102	38	32	69	41	40
1940	..	278	96	71	61	9	2	118	34	26	80	50	40
1941	..	370	138	80	70	11	2	141	50	34	83	42	48
1942	..	290	101	69	64	12	1	92	30	44	79	49	42
1943	..	277	106	63	72	11	3	101	32	34	74	42	46
1944	..	234	95	78	58	10	4	86	33	26	67	42	44
1945	..	246	107	71	60	10	2	84	29	41	55	35	42
1946	..	199	97	67	52	9	2	64	28	22	53	34	37
1947	..	184	78	55	52	9	2	65	26	29	57	34	34
1948	..	166	53	54	44	8	3	56	20	15	39	30	34
1949	..	126	45	35	33	8	2	33	10	7	26	24	27
1950	..	116	39	22	31	5	3	20	9	5	22	19	27
1951	..	102	33	35	30	6	1	15	4	6	14	18	29
1952	..	57	20	17	16	4	1	10	4	4	9	12	25
1953	..	48	13	6	9	3	1	16	2	1	9	13	22

Rates have been adjusted to the 6th Revision of the International Classification throughout.

Table LXXIV.—Tuberculosis of meninges and central nervous system, and other non-respiratory tuberculosis : Death rates per million living in Standard Regions, 1953

	Tuberculous meningitis						Other non-respiratory tuberculosis					
	Males			Females			Males			Females		
	0—	5—	15 and over	0—	5—	15 and over	0—	5—	15 and over	0—	5—	15 and over
ENGLAND AND WALES	46	9	4	48	10	3	12	5	19	16	2	15
Aggregates summary (by type of area) ..	43	6	6	32	9	4	8	2	20	14	2	13
Conurbations :												
<i>Areas outside conurbations :</i>												
Urban areas with populations of 100,000 and over	59	5	2	70	17	3	13	2	22	9	2	15
Urban areas with populations of 50,000 and under 100,000	30	12	2	81	8	4	30	8	17	16	—	19
Urban areas with populations under 50,000	46	17	4	40	10	4	8	8	19	17	3	17
Rural Districts	48	9	4	63	6	2	18	4	14	22	2	17
<i>Regions :</i>												
Northern	44	17	8	62	13	6	7	20	28	23	—	19
East and West Ridings	55	3	5	58	13	1	25	6	19	6	—	16
North Western	39	8	5	41	6	4	16	4	21	12	2	15
North Midland	64	4	7	45	12	1	14	4	19	15	—	18
Midland	60	14	8	57	9	3	11	3	18	17	—	11
Eastern	55	8	2	33	13	—	—	—	14	—	4	12
London and South Eastern	25	10	2	26	8	4	5	4	19	16	4	14
Southern	47	5	1	29	—	3	28	—	12	10	—	11
South Western	43	—	3	54	9	1	17	—	16	27	5	21
Wales (including Monmouthshire)	67	20	6	141	21	7	10	5	18	40	—	22

CANCER

87,924 deaths from malignant neoplasms (I.S.C. Nos. 140-205) were registered in 1953 ; 45,935 were of men and 41,989 of women. The percentage ratios of deaths from cancer to deaths from all causes were 17·7 for males and 17·2 for females. In 1952 male deaths from cancer were 45,429 and female deaths 42,213 while the proportion of cancer deaths to total deaths was 17·6 per cent for each sex. The increase of male deaths was accounted for by the further increased mortality from cancer of the lung, 900 more deaths having been registered from cancer of this site than in 1952. If cancer of the lung is omitted male deaths from cancer amounted to 12·7 per cent and female deaths 16·3 per cent of deaths from all causes. Table LXXX (page 154) which gives the age-specific death rates for cancer of the various sites, shows that between 1952 and 1953 mortality from cancer of the lung among males increased most between the ages of 65 and 84, viz. :—

	All ages	25—	35—	45—	55—	65—	75—	85 and over
Cancer of the lung : age-specific death rates per million living in								
1952	568	25	179	843	2,142	2,514	1,623	1,046
1953	607	27	173	881	2,245	2,768	1,913	868
Percentage increase or decrease	7	8	—3	4·5	4·8	10·1	17·9	—17

Compared with 1952 the crude death rate from cancer of the œsophagus in men declined by about 10 per cent (from 70 to 63 per million) ; all age-groups (over 45) were affected in the fall.

For cancer of the rectum male death rates declined at all ages and the crude death rate was 6 per cent lower than in 1952 (when it was 162 per million).

The crude death rate from cancer of the prostate rose by about 5 per cent ; below 84 years of age all age-groups appear equally affected ; at ages 85 years and over there was a slight fall.

Little change occurred at any other important site.

Among women no striking falls in mortality were recorded in 1953 compared with 1952.

Cancer by Region and Population Density

Table LXXV (page 148) shows age-specific death rates for cancer as a whole by population aggregates of England and Wales and by four regional groups.

For each sex the death rates from cancer were greater in the towns than in the country but only among men aged 45 years and over was there a regular urbanization gradient from high rates in the conurbations to low ones in the rural districts. In England, the highest recorded rates for each sex were usually found in the North, in one of the large industrial conurbations.

Cancer of the Lung—Urbanization

The table below gives the Standardised Mortality Ratios for both sexes for cancer of the lung in population aggregates of England and Wales for the period 1950-53. In addition to the rates in the rural districts as usually described, rates are given for selected rural areas where no town impinges upon, or large industrial concern is included in, the selected or "truly rural" area (see page 175 and Appendix B).

	Males	Females
ENGLAND AND WALES	100	100
Aggregates summary (by type of area)		
Conurbations	126	121
<i>Areas outside conurbations :—</i>		
Urban areas with populations of 100,000 and over ..	111	101
Urban areas with populations of 50,000 and under 100,000	95	89
Urban areas with populations under 50,000	84	86
Rural Districts	64	76
Selected Rural Areas of England and Wales ("Truly Rural")		
North of England	48	67
Midlands and East	47	66
South of England	49	67
Wales	33	56

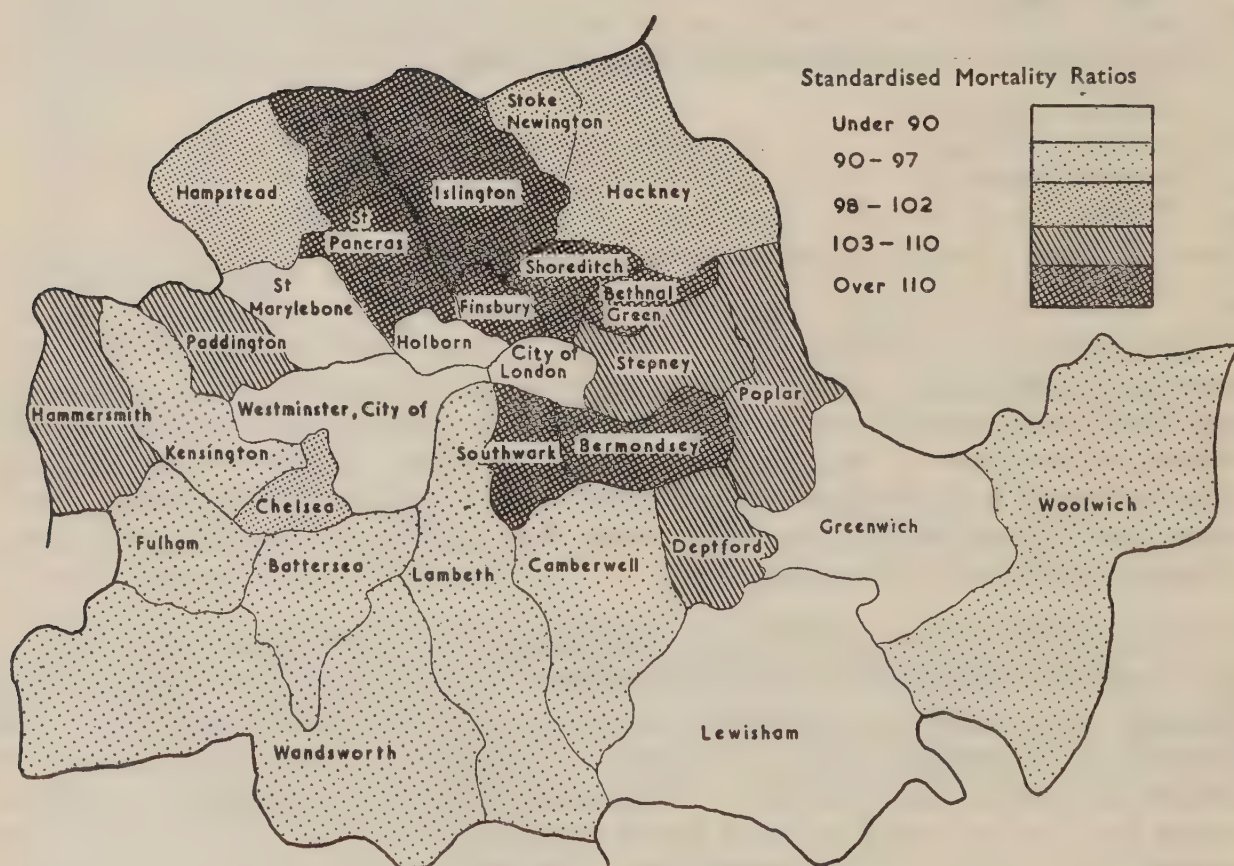
The ratios are very much higher in the conurbations than elsewhere and a regular gradient is seen through the larger to the smaller towns, the rural districts, and the "truly rural" areas where the ratio is lowest. The gradient is much steeper in the case of men than of women, with the result that the mortality ratios (though not the death rates) in the rural districts and the "truly rural" areas are higher for females than males while in the conurbations and larger towns the male ratios are higher.

Table LXXXIII (page 159) gives Standardised Mortality Ratios for cancer of the lung for 1950-53 for each Metropolitan Borough in the Administrative County of London separately for males and females. The ratios have been divided into 5 groups and are shown in Diagram 6 (male distribution) and Diagram 7 (female distribution). Diagram 6 shows that among men the higher ratios tend to be found in those boroughs nearest the City of London except towards the West. In both sexes the ratios tend to be lower in the South and West and higher in the North and East and, though the correlation between the male and female figures is not significant ($r = 0.291$), the distribution of the female mortality figures resembles to some extent that of the male in that the higher figures are found in the central and northern boroughs. In detail however there are very large differences; the male ratios in Holborn, Kensington, Woolwich, Westminster and Lambeth are low while the female ratios are high. Male ratios are high in Bethnal Green, Hammersmith and Deptford though female ratios in those boroughs are considerably below the general average.

Diagram 6

LONDON ADMINISTRATIVE COUNTY CANCER OF LUNG AND BRONCHUS

MALES

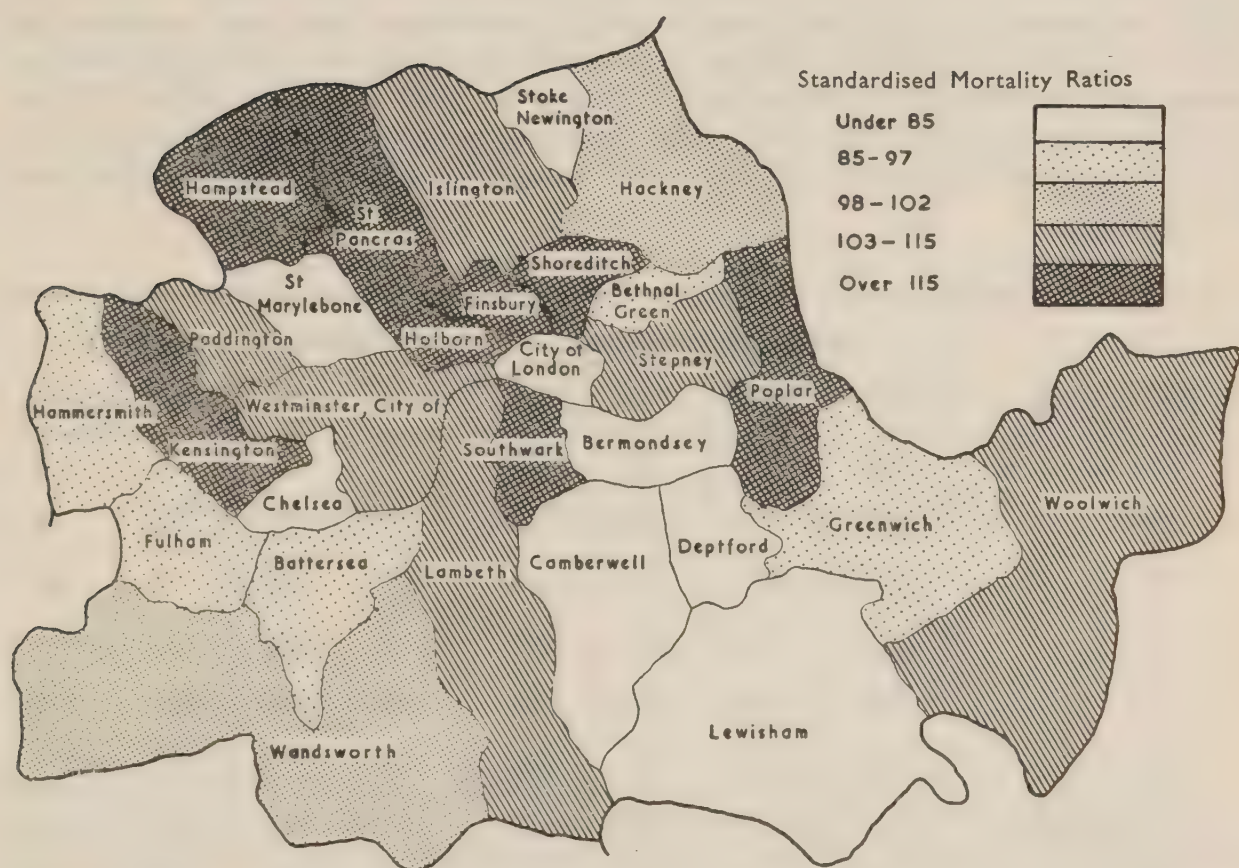


Cancer of Lung and Bronchus—Males : Standardised Mortality Ratios in the City of London and in the Metropolitan Boroughs, 1950-53. (London Admin. County=100).

Diagram 7

LONDON ADMINISTRATIVE COUNTY CANCER OF LUNG AND BRONCHUS

FEMALES



Cancer of Lung and Bronchus— Females: Standardised Mortality Ratios in the City of London and in the Metropolitan Boroughs, 1950-53. (London Admin. County=100).

A comparison between Diagram 6 and a similar analysis for the years 1946-49⁽¹⁾ shows that the pattern of mortality among males has remained remarkably constant, the main differences between the two periods being that higher values were found for 1950-53 in Deptford and St. Pancras and lower ones in Battersea, Camberwell and Stoke Newington. The consistency of the pattern makes it improbable that these discrepancies are merely casual and invites further investigation. No correlation was found in the present analysis between mortality and social class indices while the correlation between housing density and mortality was small and much below the level of significance.

Cancer of the Uterus (I.S.C. Nos. 171-174)

In 1953 cancer of the uterus accounted for 3,945 deaths ; 2,501 or 63 per cent were allocated to cervix (No. 171), 1,203 or 30 per cent to corpus (No. 172) while 200 or 5 per cent were not specified (No. 174). As explained in the Statistical Review for 1952, Text Volume, the division of death registrations of cancer of the uterus between cancer of the cervix and cancer of the corpus cannot be considered reliable before 1950, when the practice was introduced of requesting further information if the certifying medical practitioner had not specified the part of the uterus involved. Before that date about 40 per cent of all uterine cancers were recorded as unspecified (I.S.C. No. 174) ; during 1950-1952 the proportion was under 6 per cent. The table below gives the age-specific death rates of cancer of the cervix and cancer of the corpus uteri for each of the years 1950 to 1953 :

Age at death	Cancer of cervix uteri				Cancer of corpus uteri			
	1950	1951	1952	1953	1950	1951	1952	1953
25-	19	18	16	23	2	1	1	2
35-	71	73	79	77	13	13	12	8
45-	188	178	173	160	57	53	56	54
55-	314	297	289	267	136	128	132	145
65-	335	314	306	308	193	205	205	177
75-	381	392	359	358	250	277	277	273
85 and over ..	359	394	277	329	200	171	257	230
All ages ..	117	114	111	109	51	52	54	53

Over these four years the mortality rate from cancer of the cervix has, except at the two youngest age-groups, fallen steadily while the rates from cancer of the corpus uteri showed little regular variation. The mortality from cancer of the uterus as a whole has fallen remarkably at all ages below 75 years during the past two decades but from comparisons over the short period for which separate figures are available it is not possible to suggest the relative importance of either component in the production of the fall.

(1) Stocks, P., British Journal of Cancer, Vol. 6, p. 99, 1952.

Under the national scheme of cancer registration about 3,000 confirmed cases of cancer of the cervix uteri are registered annually, a number which appreciably exceeds the recorded deaths. In 1949, the last year for which records of confirmed cases have so far been tabulated by age-groups, the number registered was, 2,739, while the annual deaths recorded were :—1950, 2,654 ; 1951, 2,585 ; 1952, 2,547 ; and 1953, 2,501. Although it is probable that cases of cancer of the cervix are more fully registered during life than those of cancer of any other site, it is nevertheless certain that many cases are still unrecorded, the deficiency amounting probably to about 20 per cent. Since cancer of the cervix is a disease of middle life, the incidence falling rapidly after the age of 65 years, it may be profitable to compare the registration and death rates at corresponding ages. This is done in the following table and in Diagram 8, where the age-specific rates per million living are shown for 5 year age-groups from 25 years to 85 and over, both for cases registered in 1949 and for deaths in 1953 :

Age-group	Registration rate, 1949	Death rate, 1953
25–	20	12
30–	44	34
35–	83	56
40–	136	97
45–	214	144
50–	307	178
55–	347	255
60–	353	281
65–	282	294
70–	197	326
75–	158	383
80–	81	309
85 and over	29	329

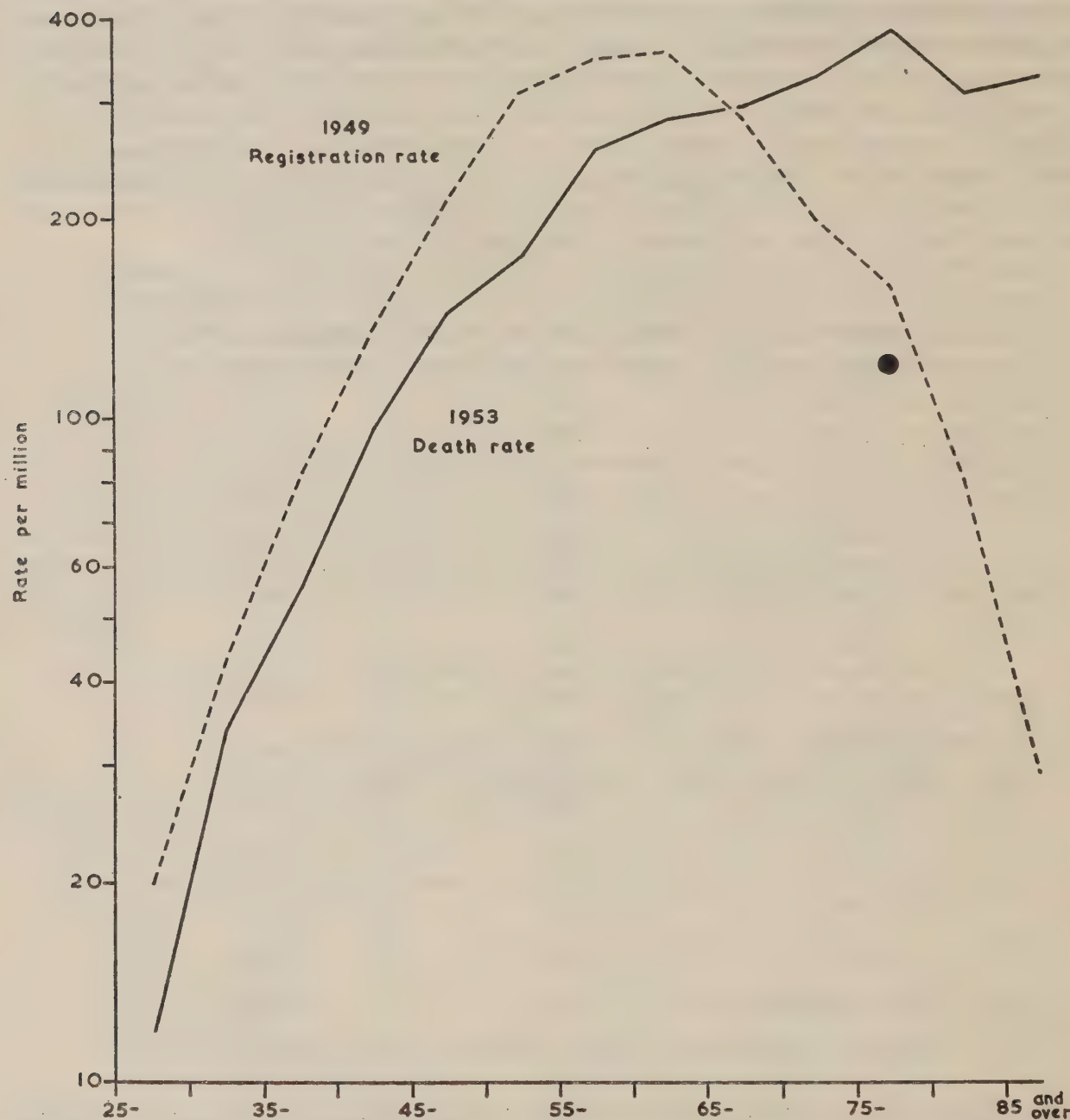
The curve of the registration rate which it may be assumed closely resembles and is but little lower than the true incidence rate rises rapidly between 25 and 54 years to reach a peak between 55 and 64 years after which it as rapidly declines, the mean age at registration being 56 years. The mortality rate though at first lower rises similarly with age but much less rapidly until it reaches a peak between 75 and 79 years of age after which its course is irregular. The mean age at death in this series was 60 years. In 1949, 78 per cent of the women registered as suffering from cancer of the cervix were under 65 years of age while in 1953 only 61 per cent of the deaths were so recorded. Under 70 years the figures were 89 per cent and 74 per cent respectively.

Until registration during life fully reflects the incidence of cancer of the cervix it is impossible to formulate any detailed conclusions, but considering the relatively short history of untreated cancer of the cervix (under 2 years, Greenwood 1926⁽¹⁾) it seems not unreasonable to suggest as a conservative estimate

(1) Ministry of Health. Reports on Public Health and Medical Subjects, 1926, No.33.

that about a quarter of all cases of cancer of the cervix that occur in England and Wales are completely cured and finally die from some other disease, while of those where treatment has not eradicated the disease in the majority of cases life has been considerably prolonged.

Diagram 8



Cancer of Cervix Uteri : Death rates in 1953 and Registration rates in 1949, per million living at various ages.

Cancer of the corpus uteri in 1953 was recorded as the cause of death of 1,203 women. This site now accounts for 30 per cent of all deaths from cancer of the uterus, only 5 per cent of deaths being recorded as uterus unspecified. Thirty years ago (Lane-Claypon 1927⁽¹⁾) cancer of the corpus was assumed to account for, in hospital practice, about 20 per cent of all uterine cancers, though a lower figure was given by most authors. At that time no separate mortality figures were given for cervix or corpus and it was not until 1950 that even approximate rates could be calculated for the two sites. No evidence is here available to suggest whether or not there has been a relative change in incidence over the years.

(1) Ministry of Health. Reports on Public Health and Medical Subjects, 1927, No.40.

Under the National Cancer Registration Scheme only 20 per cent of all uterine cancers are registered as cervical. There is a heavy bias towards cases treated by radiotherapy as opposed to surgery. Only 3 per cent of registered cases of cervical cancer are treated by surgery alone compared with about 40 per cent of cases of cancer of the corpus. Since 1950 the number of deaths certified each year as due to cancer of the corpus has averaged 1,200, while only 750 cases were registered under the scheme in 1951 and only 645 in 1949. The number of cases of cervical cancer registered exceeded the number of deaths in those years. Thus there is a considerable deficit in the case registration of cancer of the corpus and although the magnitude cannot be estimated accurately it appears probable that the mortality ratio between these two sites does not differ widely from the incidence ratio.

Cancer of the female genital organs—Influence of Marriage and Fertility

Death rates from cancer of cervix and corpus uteri and of ovary in the period 1950-53 classified by age and marital condition are given in Table LXXVII (page 152). At all ages the mortality rates from cervical cancer in single women were much lower than those for married women the single rarely exceeding one half the married rate. Amongst widowed and divorced women the rates are higher still but the difference tends to disappear with increasing age when the proportion of divorced to widows diminishes.

For cancer of the body of the uterus single women had consistently higher rates while the rates for widowed and divorced women significantly exceeded the married rate at the younger ages. In general the excess was comparable with the increased mortality among widowed and divorced women from all causes.

The death rate of single women from cancer of the ovary at ages over 35 exceeds that of married women by nearly 50 per cent and there is little difference between the married women and the widowed and divorced.

These differences are reasonably well reflected in the E.A.D.R. 35-74 but the crude death rate at all ages 15 and over tends by reason of the large proportion of single women and the small proportion of widowed and divorced at earlier ages to mask the differences shown in the age-specific rates.

The influence of fertility is shown in Table LXXVIII (page 152) where death rates are given for single, married infertile, and married fertile women for various age-groups from cancer of the cervix uteri, corpus uteri and ovary. Reliable estimates for the numbers of married women in the fertile and infertile groups are only available below the age of 50 and for these ages the rates are calculated per million women at risk. The rates at ages 45-54 and over 55 are the proportional death rates per 10,000 deaths from all causes which at these older ages should afford a reliable comparison of mortality between the different groups of women. In all age-groups the rates for cancer of the cervix uteri among single women are much lower than those for married infertile women which are again lower than for those who have borne children.

Two hypotheses seem possible, the first that the incidence of cancer of the cervix is related to pregnancy or parturition, the intermediate position of the married but infertile being explained by the fact that many of them have been pregnant and miscarried though they have produced no live children. The second relates the increased incidence to sexual union and supposes that the habitual use of contraceptive methods diminishes this effect. If it may be assumed that infertile married women employ contraceptive methods to a greater extent than fertile, the differential rates can be explained without reference to the effect of child-bearing.

Cancer of the corpus uteri presents a quite different picture ; the highest rates are found among the married but infertile women and the lowest among those who have borne children. No hypothesis which relates the risk of cancer to pregnancy or parturition can explain the intermediate position of single women. It appears more probable that those uteri capable of implantation and gestation are less liable to this form of cancer than those less capable. This hypothesis becomes valid if we assume that potential parents form a greater proportion of single than of married but infertile women.

The alternative assumption that the disease itself or some precancerous condition prevents complete conception implies that the existence of such a state can be of considerable duration and must frequently exceed 20 years.

In the following table, rates of mortality from cancer of the cervix uteri, corpus uteri and ovary at various ages for single women and married but infertile women are expressed as ratios to those for married and fertile women taken as unity.

Age at death	Cervix uteri (171)		Corpus uteri (172)		Ovary etc. (175)	
	Single	Married Infertile	Single	Married Infertile	Single	Married Infertile
15- ..	0.2	0.7	—	—	1.9	1.6
25- ..	0.5	0.8	1.3	2.3	1.2	1.6
35- ..	0.5	0.7	1.5	2.3	1.6	2.0
45-49..	0.4	0.7	1.5	1.9	1.6	1.6
45- ..	0.3	0.6	1.2	1.6	1.2	1.7
55- ..	0.4	0.7	1.3	1.6	1.5	1.7
65- ..	0.4	0.8	1.3	1.6	1.4	1.4
75 and over	0.4	0.8	0.9	1.1	1.2	1.5

Cancer of the ovary exhibits a similar pattern to cancer of the corpus uteri. The death rate among married but infertile women is highest and that among the married and fertile the lowest, but the difference between the rates for single and married but infertile women is small compared with the difference between the single and fertile, suggesting that some mechanism associated with fertility is the main factor.

Urbanisation.—In Table LXXIX (page 153) the death rates per million living are shown for cancer of all sites, cancer of the cervix uteri, cancer of the corpus uteri and cancer of the ovary, for England and Wales as a whole and for the various national population aggregates ; the second half of the table gives the rates expressed as percentages of the rate for England and Wales.

The death rate from cancer of all sites is considerably lower in the rural districts than in any of the urban aggregates but there is no suggestion of any gradient between small and large urban areas. The rates for cancer of the corpus uteri and cancer of the ovary closely parallel those for cancer of all sites but the death rates from cancer of the cervix are relatively low in the rural districts even when adjustments have been made for the lower rural mortality from cancer of all sites.

Table LXXVI (page 150) gives the age-specific death rates of these three forms of cancer in population aggregates in the four regional groups. At each age and in all regions cancer of the cervix is less commonly a cause of death in rural districts than in urban areas but for no age-group can any urbanisation gradient be seen ; no such clearly defined difference between town and country is seen for cancer of the uterine body or ovary. The death rates from cancer of the cervix are highest at each age in the North of England and those from cancer of the ovary highest in the South.

As an adjustment for the differential mortality in urban and rural districts and in the different regions the following table has been constructed to give the mortality from cancer of the cervix expressed as a percentage of the total mortality from cancer. This is shown for five age-groups in the national population aggregates and for each of four regional groups in England and Wales :

	35–	45–	55–	65–	75 and over
ENGLAND AND WALES	11·0	8·8	7·5	4·9	3·2
Aggregates summary (by type of area)					
Conurbations	9·6	8·3	7·8	5·2	3·7
<i>Areas outside conurbations :—</i>					
Urban areas with populations of 100,000 and over	10·3	9·6	8·4	5·3	3·5
Urban areas with populations of 50,000 and under 100,000	18·4	8·8	8·8	5·4	3·9
Urban areas with populations under 50,000	12·3	9·6	7·5	4·8	2·6
Rural Districts	10·1	8·4	5·4	4·0	2·7
Standard Regional groups					
North of England	12·5	10·5	9·1	5·3	3·7
Midlands and Eastern	10·9	8·9	6·3	4·9	2·8
South of England	9·1	7·3	6·7	4·8	3·1
Wales (including Monmouthshire)	15·7	9·4	8·0	3·8	3·6

The differences shown in Table LXXVI where the age-specific mortality rates are compared have been reduced but the same pattern is still evident.

Rural mortality is shown to be still lower than urban though below the age of 55 the differences are smaller. Again no gradient appears between different urban categories, the mortality in the conurbations being frequently less than in the smaller towns. In the North of England where the general mortality from cancer is highest the relative mortality from cancer of the cervix still exceeds that in other regions.

The sex ratio in cancer

With the exception of cancer of the reproductive organs, breast, large intestine and thyroid, men are more liable than women to neoplastic disease of almost all other organs. These differences may be due to factors inherent in sex or to differential exposure to carcinogens, either in industrial processes peculiar to men or connected with the general environment to which the working man is, or was until recently, exposed as compared with the more stay at home woman. Any such differential exposure might be expected to vary from place to place and between urban and rural conditions, and be reflected in variations in the sex ratio of cancer of certain sites. Table LXXXIV (page 160) has been constructed to facilitate the study of this question. Fifteen sites of neoplastic disease common to both sexes have been selected and the numbers of male and female deaths from cancer, assigned to each site between 1950 and 1953, are shown separately for London and for each of the Metropolitan Boroughs, County Boroughs and aggregates of Urban and Rural Districts in each county.

Table LXXV.—Cancer (6th Revision, Nos. 140-205): sex and age specific death rates per million living in four regional groups and population aggregates within groups. England and Wales, 1953

	Males							Females						
	E.A.D.R. 0-34	35- 44	45- 54	55- 64	65- 74	75 and over	Crude death rate (all ages)	E.A.D.R. 0-34	35- 44	45- 54	55- 64	65- 74	75 and over	Crude death rate (all ages)
ENGLAND AND WALES	116	575	2,077	5,616	10,604	16,512	2,166	105	702	1,818	3,574	6,250	10,924	1,833
Conurbations	124	643	2,353	6,135	11,920	17,897	2,312	105	719	1,899	3,739	6,546	11,937	1,865
Areas outside conurbations:														
Urban areas with populations 100,000 and over	127	669	2,175	6,065	11,169	17,208	2,274	103	711	1,915	3,523	6,291	10,923	1,811
Urban areas with populations 50,000 and under														
100,000	113	608	1,904	5,660	10,566	15,612	2,162	128	683	1,850	3,495	5,929	10,239	1,845
Urban areas with populations under 50,000	120	477	1,901	5,298	10,272	16,691	2,195	101	718	1,788	3,551	6,420	11,095	1,913
Rural Districts	95	448	1,666	4,298	8,566	14,581	1,798	104	635	1,605	3,371	5,667	9,966	1,696
NORTH OF ENGLAND														
(Northern, E. and W. Ridings, North Western)														
Tyneside conurbation	114	593	2,206	5,825	10,831	17,097	2,215	112	746	1,835	3,667	6,525	11,777	1,842
	98	772	2,509	6,725	12,000	20,600	2,473	128	817	1,898	3,625	6,091	11,800	1,703
W. Yorks. conurbation	97	588	2,211	6,202	10,556	15,182	2,307	121	688	2,029	3,664	6,463	12,526	2,035
S.E. Lancs. conurbation	140	597	2,556	5,898	11,795	18,607	2,392	137	754	1,904	3,890	6,946	12,354	1,994
Merseyside conurbation..	109	702	2,506	6,678	12,865	16,733	2,230	133	743	1,814	3,718	6,732	11,962	1,728
Total conurbations	117	639	2,443	6,246	11,679	17,493	2,345	131	742	1,921	3,759	6,664	12,260	1,908
Areas outside conurbations:														
Urban areas with populations 100,000 and over	142	684	2,258	6,298	11,554	18,920	2,398	100	752	1,949	3,395	6,273	12,562	1,795
Urban areas with populations 50,000 and under														
100,000	133	770	2,008	6,159	10,543	15,130	2,267	86	641	1,764	3,793	6,407	11,048	1,789
Urban areas with populations under 50,000	104	458	1,975	5,405	10,302	16,901	2,141	97	874	1,804	3,650	6,714	11,377	1,867
Rural Districts	83	452	1,792	4,286	8,302	15,613	1,705	94	618	1,471	3,546	6,034	10,655	1,632

Table LXXV.—continued.

	Males						Females									
	E.A.D.R. 0-34	35- 44	45- 54	55- 64	65- 74	75 and over	Crude death rate (all ages)	E.A.D.R. 0-34	35- 44	45- 54	55- 64	65- 74	75 and over	Crude death rate (all ages)		
MIDLANDS AND EASTERN REGIONS																
(North Midland, Midland, Eastern)	115	542	1,864	5,090	9,888	16,113	1,971	101	649	1,746	3,511	5,960	10,839	1,705		
West Midlands conurbation	109	645	2,349	6,173	11,237	17,200	2,049	86	749	1,886	3,500	6,061	12,024	1,624		
Areas outside conurbation:																
Urban areas with populations 100,000 and over	142	629	2,222	5,644	10,375	17,243	2,120	87	695	1,824	3,658	6,164	10,944	1,767		
Urban areas with populations 50,000 and under 100,000	113	540	1,591	5,319	10,219	16,148	1,881	145	564	1,669	3,515	5,736	9,794	1,627		
Urban areas with populations under 50,000	128	502	1,816	4,941	10,677	16,379	2,109	99	612	1,699	3,458	6,367	10,945	1,774		
Rural Districts	96	438	1,409	4,099	8,127	14,647	1,741	110	606	1,644	3,462	5,475	10,393	1,692		
SOUTH OF ENGLAND																
(London and South Eastern, Southern, South Western)	117	589	2,094	5,600	11,071	16,508	2,250	104	691	1,844	3,571	6,172	10,823	1,918		
Greater London conurbation	135	646	2,286	6,040	12,282	18,356	2,361	91	696	1,885	3,781	6,563	11,709	1,896		
Areas outside conurbation:																
Urban areas with populations 100,000 and over	84	657	1,887	6,267	11,952	15,526	2,296	127	731	1,993	3,539	6,541	10,075	1,958		
Urban areas with populations 50,000 and under 100,000	98	514	2,104	5,212	10,584	15,206	2,315	151	810	2,131	3,173	5,514	10,152	2,087		
Urban areas with populations under 50,000	119	508	1,893	5,172	9,930	16,473	2,296	114	647	1,738	3,575	6,107	10,946	2,089		
Rural Districts	94	476	1,802	4,500	9,061	13,978	1,871	104	642	1,640	3,133	5,347	9,224	1,716		
WALES (including Monmouthshire)																
Urban areas with populations 100,000 and over	148	782	2,512	6,129	10,638	18,171	2,368	110	593	1,905	3,442	6,206	9,683	1,643		
Urban area with population 50,000 and under 100,000	—	769	2,340	10,952	20,000	19,000	2,887	119	1,250	2,037	4,375	11,364	6,154	2,070		
Urban areas with populations under 50,000	140	386	1,933	6,151	10,284	16,882	2,279	83	778	2,108	3,437	6,867	11,468	1,898		
Rural Districts	124	377	1,865	4,396	8,710	14,672	1,961	106	749	1,618	3,568	7,023	10,769	1,777		

Table LXXVI.—Cancer of cervix uteri, corpus uteri and ovary (6th Revision, Nos. 171, 172 and 175): age specific death rates per million living in four regional groups and population aggregates within groups. England and Wales, 1953

	Cervix uteri (I.S.C. No. 171)							Corpus uteri (I.S.C. No. 172)							Ovary, Fallopian tube and broad ligament (I.S.C. No. 175)						
	E.A.D.R. 0-34	35-	45-	55-	65-	75 & over	Crude death rate (all ages)	E.A.D.R. 0-34	35-	45-	55-	65-	75 & over	Crude death rate (all ages)	E.A.D.R. 0-34	35-	45-	55-	65-	75 & over	Crude death rate (all ages)
ENGLAND AND WALES	7	77	160	267	308	354	109	1	8	54	145	177	267	53	5	64	207	280	321	286	112
Conurbations	4	69	157	291	341	440	113	1	7	57	144	180	234	50	5	68	234	291	310	319	117
Areas outside conurbations :																					
Urban areas with populations 100,000 and over	9	73	184	296	335	377	118	—	7	50	167	146	269	51	5	55	196	270	319	254	106
Urban areas with populations 50,000 and under 100,000	15	126	163	307	321	398	131	1	16	61	124	141	250	50	7	61	211	238	340	364	117
Urban areas with populations under 50,000	9	88	171	267	305	289	112	0	6	60	132	231	310	60	3	66	184	272	361	331	115
Rural Districts	7	64	135	181	228	268	83	—	10	44	158	150	298	52	5	59	183	294	292	180	102
NORTH OF ENGLAND (Northern, E. and W. Ridings, North Western)	10	93	193	335	349	434	130	1	8	56	137	183	252	50	5	58	202	264	260	270	102
Tyneside conurbation	5	167	271	417	364	333	147	5	—	51	63	121	267	34	—	83	203	250	212	200	90
W. Yorks. conurbation	8	102	197	436	366	684	164	2	8	66	127	280	237	64	3	55	241	273	280	421	123
S.E. Lancs. conurbation	6	53	214	318	384	500	133	—	16	107	136	232	229	63	13	64	235	292	232	292	116
Merseyside conurbation	5	79	144	256	339	308	96	3	—	31	192	54	231	38	3	40	186	218	250	77	76
Total conurbations	6	86	202	351	367	496	135	2	8	73	136	198	236	54	6	59	223	267	247	276	106
Areas outside conurbations :																					
Urban areas with populations 100,000 and over	11	89	162	285	420	463	125	—	—	46	118	197	309	48	5	65	178	196	262	216	89
Urban areas with populations 50,000 and under 100,000	21	92	195	439	325	393	144	4	13	61	188	87	349	55	7	52	231	204	325	262	105
Urban areas with populations under 50,000	11	132	213	337	349	304	135	—	10	30	132	141	268	44	3	66	188	265	249	322	102
Rural Districts	12	63	156	251	216	427	98	—	8	43	136	244	171	48	2	40	147	366	287	228	99

Table LXXVI.—continued.

	Cervix uteri (I.S.C. No 171)						Corpus uteri (I.S.C. No. 172)						Ovary, Fallopian tube and broad ligament (I.S.C. No. 175)								
	E.A.D.R. 0-34	35-	45-	55-	65-	75 & over	Crude death rate (all ages)	E.A.D.R. 0-34	35-	45-	55-	65-	75 & over	Crude death rate (all ages)	E.A.D.R. 0-34	35-	45-	55-	65-	75 & over	Crude death rate (all ages)
MIDLANDS AND EASTERN REGIONS (North Midland, Midland, Eastern) ..	8	71	155	222	290	306	95	0	13	39	149	156	246	46	5	62	203	263	283	274	101
West Midlands conurbation ..	3	60	139	250	329	415	93	2	12	51	150	183	244	47	5	90	259	250	195	317	102
Areas outside conurbation :																					
Urban areas with populations 100,000 and over ..	6	83	213	287	302	382	116	—	14	21	182	133	135	42	9	34	206	278	374	315	112
Urban areas with populations 50,000 and under 100,000 ..	18	98	205	256	352	453	125	—	—	13	119	154	247	37	3	86	193	290	264	412	109
Urban areas with populations under 50,000 ..	12	62	139	203	321	225	92	—	10	57	92	232	210	48	1	67	165	248	383	270	103
Rural Districts ..	6	68	121	163	208	225	74	—	20	35	187	88	351	52	5	44	197	266	200	183	89
SOUTH OF ENGLAND (London and South Eastern, Southern, South Western) ..	5	63	134	239	297	338	101	0	6	63	148	185	288	58	5	71	218	309	399	332	131
Greater London conurbation ..	2	59	128	254	322	408	101	—	4	46	149	165	230	48	5	68	237	320	387	347	129
Areas outside conurbation :																					
Urban areas with populations 100,000 and over ..	14	46	191	299	304	274	116	—	9	91	171	130	249	59	—	93	182	299	362	274	120
Urban areas with populations 50,000 and under 100,000 ..	8	179	76	247	273	379	122	—	24	113	78	145	202	56	11	36	214	221	418	404	135
Urban areas with populations under 50,000 ..	6	48	139	218	282	287	100	1	—	77	158	302	404	85	5	77	197	349	436	425	151
Rural Districts ..	6	51	138	182	254	242	85	—	5	66	152	157	352	61	9	76	204	279	403	182	120
WALES (including Monmouthshire) ..	6	115	179	280	257	382	112	—	5	54	160	190	327	55	3	49	185	247	267	109	88
Urban area with population 100,000 and over ..	6	66	136	352	277	476	111	—	—	45	244	79	714	68	6	—	249	379	198	79	98
Urban area with population 50,000 and under 100,000 ..	—	250	370	—	909	—	159	—	250	—	—	909	—	96	—	250	185	313	—	—	96
Urban areas with populations under 50,000 ..	7	148	226	370	236	437	137	—	—	100	148	236	317	64	—	37	188	133	365	159	83
Rural Districts ..	5	96	127	94	227	256	73	—	—	—	117	162	64	29	5	96	127	305	194	64	86

Table LXXVII.—Cancer of cervix uteri, corpus uteri and ovary : annual average death rates per million women aged 15 and over, according to marital condition. 1950-53

(Rates based on less than 50 deaths are shown in italics)

Age at Death	Cervix uteri (I.S.C. No. 171)			Corpus uteri (I.S.C. No. 172)			Ovary (I.S.C. No. 175)		
	Single	Married	Widowed or Divorced	Single	Married	Widowed or Divorced	Single	Married	Widowed or Divorced
15—	<i>0</i>	<i>2</i>	<i>—</i>	<i>0</i>	<i>—</i>	<i>—</i>	<i>5</i>	<i>4</i>	<i>—</i>
25—	<i>10</i>	<i>20</i>	<i>48</i>	<i>2</i>	<i>2</i>	<i>8</i>	<i>14</i>	<i>13</i>	<i>16</i>
35—	<i>41</i>	<i>75</i>	<i>181</i>	<i>14</i>	<i>10</i>	<i>26</i>	<i>83</i>	<i>56</i>	<i>80</i>
45—	<i>76</i>	<i>183</i>	<i>271</i>	<i>73</i>	<i>50</i>	<i>64</i>	<i>280</i>	<i>192</i>	<i>200</i>
55—	<i>130</i>	<i>298</i>	<i>383</i>	<i>165</i>	<i>124</i>	<i>148</i>	<i>381</i>	<i>264</i>	<i>276</i>
65—	<i>129</i>	<i>328</i>	<i>374</i>	<i>232</i>	<i>189</i>	<i>188</i>	<i>428</i>	<i>302</i>	<i>294</i>
75 and over	<i>204</i>	<i>367</i>	<i>407</i>	<i>296</i>	<i>244</i>	<i>258</i>	<i>378</i>	<i>255</i>	<i>274</i>
All ages									
15 and over	<i>41</i>	<i>136</i>	<i>353</i>	<i>51</i>	<i>50</i>	<i>169</i>	<i>119</i>	<i>123</i>	<i>254</i>
E.A.D.R. 35-74	<i>94</i>	<i>221</i>	<i>302</i>	<i>121</i>	<i>93</i>	<i>107</i>	<i>293</i>	<i>204</i>	<i>213</i>

Table LXXVIII.—Cancer of cervix uteri, corpus uteri and ovary : death rates per million women aged 15-49, and proportionate rates per 10,000 deaths from all causes at ages 45 and over, according to marital condition. 1950-53

(Rates based on less than 50 deaths are shown in italics)

Age at death	Cervix uteri (I.S.C. No. 171)			Corpus uteri (I.S.C. No. 172)			Ovary (I.S.C. No. 175)		
	Single	Married infertile	Married fertile	Single	Married infertile	Married fertile	Single	Married infertile	Married fertile
	<i>Per million women aged 15-49 years</i>								
15—	<i>0</i>	<i>1</i>	<i>2</i>	<i>0</i>	<i>—</i>	<i>—</i>	<i>5</i>	<i>4</i>	<i>3</i>
25—	<i>10</i>	<i>18</i>	<i>21</i>	<i>2</i>	<i>3</i>	<i>1</i>	<i>14</i>	<i>19</i>	<i>11</i>
35—	<i>41</i>	<i>57</i>	<i>78</i>	<i>14</i>	<i>20</i>	<i>9</i>	<i>83</i>	<i>97</i>	<i>49</i>
45-49	<i>65</i>	<i>112</i>	<i>160</i>	<i>48</i>	<i>62</i>	<i>32</i>	<i>223</i>	<i>229</i>	<i>141</i>
	<i>Per 10,000 deaths from all causes</i>								
45—	<i>125</i>	<i>279</i>	<i>432</i>	<i>121</i>	<i>154</i>	<i>99</i>	<i>462</i>	<i>617</i>	<i>370</i>
55—	<i>103</i>	<i>190</i>	<i>283</i>	<i>130</i>	<i>156</i>	<i>100</i>	<i>302</i>	<i>355</i>	<i>208</i>
65—	<i>40</i>	<i>87</i>	<i>112</i>	<i>72</i>	<i>92</i>	<i>56</i>	<i>132</i>	<i>135</i>	<i>94</i>
75 and over	<i>18</i>	<i>38</i>	<i>46</i>	<i>27</i>	<i>32</i>	<i>29</i>	<i>34</i>	<i>43</i>	<i>29</i>
E.A.D.R. 45-74	<i>89</i>	<i>185</i>	<i>276</i>	<i>108</i>	<i>134</i>	<i>85</i>	<i>299</i>	<i>369</i>	<i>224</i>

Table LXXIX.—Cancer of all sites, and of cervix uteri, corpus uteri and ovary : death rates of women per million living in population aggregates of England and Wales, with the ratio of each to the national rate (= 100). 1953

	Rate per million living (all ages)					Percentage of rate for England and Wales			
	All sites (I.S.C. Nos. 140-205)	Cervix uteri (I.S.C. No. 171)	Corpus uteri (I.S.C. No. 172)	Ovary (I.S.C. No. 175)		All sites	Cervix uteri	Corpus uteri	Ovary
ENGLAND AND WALES	1833	109	53	112		100	100	100	100
Conurbations	1865	113	50	117		102	104	94	104
<i>Areas outside conurbations :</i>									
Urban areas with populations 100,000 and over	1811	118	51	106		99	108	96	95
Urban areas with populations 50,000 and under 100,000 ..	1845	131	50	117		101	120	94	104
Urban areas with populations under 50,000	1913	112	60	115		104	103	113	103
Rural Districts	1696	83	52	102		93	76	98	91

Table LXXX.—Cancer (6th Revision, Nos. 140-205) : sex and age specific death rates per million living from cancer at various sites. England and Wales, 1953—Males

Int. Classn. No. 6th Revision	Site or Organ	All ages	0—	5—	15—	25—	35—	45—	55—	65—	75—	85 and over
140	Lip ..	42	—	0	1	2	4	13	67	217	620	691
141	Tongue ..											
142	Salivary gland ..											
143	Floor of mouth ..											
144	Other parts of mouth and mouth unspecified ..											
145	Oral mesopharynx ..	24	—	1	1	1	6	17	42	140	232	338
146	Nasopharynx ..											
147	Hypopharynx ..											
148	Pharynx unspecified ..											
150	Œsophagus ..	63	—	—	—	2	9	32	127	352	729	735
151	Stomach ..	379	—	—	1	17	89	343	978	2,044	2,927	2,868
152	Small intestine, including duodenum ..	201	—	1	1	14	41	135	366	1,046	2,298	2,985
153	Large intestine, except rectum ..											
154	Rectum ..	153	—	—	0	5	24	88	306	852	1,708	1,838
155	Biliary passages and liver (stated to be a primary site) ..	23	2	—	0	2	5	24	53	115	194	162
157	Pancreas ..	81	—	—	1	3	20	73	197	438	649	794
161	Larynx ..	35	—	—	—	—	3	24	92	184	349	250
162	Trachea, bronchus and lung specified as primary ..	607	—	—	4	27	173	881	2,245	2,768	1,913	868
163	Lung and bronchus, unspecified as to whether primary or secondary ..											
170	Breast ..	4	—	—	—	—	3	4	14	15	16	44
177	Prostate ..	149	1	—	0	0	1	23	172	890	2,364	2,706
178	Testis ..	9	2	1	9	17	13	9	7	12	18	—
179	Other and unspecified male genital organs ..	6	—	—	—	—	1	5	10	26	62	176
180	Kidney ..	31	5	3	1	3	11	40	89	133	159	147
181	Bladder and other urinary organs ..	86	1	0	—	1	6	60	197	467	884	1,103

Table LXXX.—continued.

Int. Classn. No. 6th Revision	Site or Organ	All ages	0—	5—	15—	25—	35—	45—	55—	65—	75—	85 and over
190	Skin (malignant melanoma)	22	1	0	1	7	7	14	32	82	278	632
191	Skin (malignant neoplasm)											
193	Malignant neoplasm of brain and other parts of nervous system	38	16	13	12	17	39	74	104	57	20	29
194	Thyroid gland	4	—	—	—	—	0	7	12	21	27	—
195	Other endocrine glands	2	8	1	1	1	2	2	5	2	4	15
196	Bone (including jaw bone)											
197	Connective tissue	23	—	5	15	9	12	18	55	88	123	147
158	Peritoneum.. .. .											
164	Mediastinum											
198	Secondary and unspecified malignant neoplasm of lymph nodes	13	3	0	3	3	8	17	36	46	78	44
200	Lymphosarcoma and reticulosarcoma	21	5	6	8	7	12	27	51	81	70	88
201	Hodgkin's disease	23	1	5	16	23	27	30	41	55	32	—
202	Other forms of lymphoma (reticulosis)	4	1	0	1	1	2	7	10	13	11	15
203	Multiple myeloma (plasmocytoma)	9	—	—	—	0	6	13	36	34	16	—
204	Leukæmia and aleukæmia	53	54	30	24	16	36	47	108	148	207	118
205	Mycosis fungoides	1	—	—	—	—	0	0	2	4	—	—
Others in 140—205	Remaining sites	58	3	1	3	4	14	51	164	273	433	485
140—205	Total	2,166	102	68	104	182	575	2,077	5,616	10,604	16,419	17,279
193	Malignant neoplasm of brain and other parts of nervous system											
223	Benign neoplasm of brain and other parts of nervous system	63	25	20	17	28	61	120	179	105	48	29
237	Neoplasm of unspecified nature of brain and other parts of nervous system											

Table LXXXI.—Cancer (6th Revision, Nos. 140-205): sex and age specific death rates per million living from cancer at various sites. England and Wales, 1953—Females

Int. Classn. No. 6th Revision	Site or Organ	All ages	0—	5—	15—	25—	35—	45—	55—	65—	75—	85 and over
140	Lip	12	—	—	—	1	3	7	22	43	100	138
141	Tongue		—	—	—	—	—	—	—	—	—	—
142	Salivary gland		—	—	—	—	—	—	—	—	—	—
143	Floor of mouth		—	—	—	—	—	—	—	—	—	—
144	Other parts of mouth and mouth unspecified		—	—	—	—	—	—	—	—	—	—
145	Oral mesopharynx	12	—	—	1	1	6	18	28	39	51	66
146	Nasopharynx		—	—	—	—	—	—	—	—	—	—
147	Hypopharynx		—	—	—	2	4	26	65	143	283	414
148	Pharynx unspecified		—	—	1	14	51	157	412	1,069	2,211	2,566
150	Œsophagus	38	—	—	—	—	—	—	—	—	—	—
151	Stomach	271	—	—	—	—	—	—	—	—	—	—
152	Small intestine, including duodenum	247	—	—	2	11	50	147	391	898	1,946	3,276
153	Large intestine, except rectum		—	—	0	9	26	84	197	378	758	875
154	Rectum	106	—	—	—	—	—	—	—	—	—	—
155	Biliary passages and liver (stated to be primary site)	34	1	—	0	1	3	19	69	143	237	230
157	Pancreas	65	—	—	0	2	11	41	116	266	486	474
161	Larynx	7	—	—	—	1	2	9	17	26	35	46
162	Trachea, bronchus and lung specified as primary	98	—	0	1	11	40	107	235	361	435	263
163	Lung and bronchus, unspecified as to whether primary or secondary)		—	—	—	—	—	—	—	—	—	—
170	Breast	356	—	—	0	36	218	494	766	1,073	1,510	2,289
171	Cervix uteri	109	1	—	1	23	77	160	267	308	358	329
172	Corpus uteri	53	—	—	—	2	8	54	145	177	273	230
173	Other parts of uterus, including chorionepithelioma	11	—	—	0	2	7	12	21	39	34	79
174	Uterus unspecified		—	—	—	—	—	—	—	—	—	—
175	Ovary, Fallopian tube and broad ligament	112	1	2	4	11	64	207	280	321	301	197
176	Other and unspecified female genital organs	21	1	—	—	2	3	13	22	83	175	283

Table LXXXI.—continued.

Int. Classn. No. 6th Revision	Site or Organ	All ages	0—	5—	15—	25—	35—	45—	55—	65—	75—	85 and over
180	Kidney	19	10	3	1	2	6	15	42	70	95	79
181	Bladder and other urinary organs	35	2	0	—	1	4	23	54	129	302	342
190	Skin (malignant melanoma)	20	—	0	1	7	9	13	30	54	144	316
191	Skin (malignant neoplasm)											
193	Malignant neoplasm of brain and other parts of nervous system	26	18	14	7	17	25	45	56	30	11	7
194	Thyroid gland	12	—	—	—	1	4	9	24	48	61	66
195	Other endocrine glands	2	8	1	—	1	2	2	3	3	8	—
196	Bone (including jaw bone)	17	3	5	8	4	6	13	28	50	97	33
197	Connective tissue											
158	Peritoneum	13	4	1	1	2	6	12	24	48	61	39
164	Mediastinum											
198	Secondary and unspecified malignant neoplasm of lymph nodes											
200	Lymphosarcoma and reticulosarcoma	13	3	4	5	3	6	13	28	48	40	20
201	Hodgkin's disease	13	—	1	9	13	12	16	22	24	24	13
202	Other forms of lymphoma (reticulosis)	3	4	0	1	2	2	3	4	10	6	—
203	Multiple myeloma (plasmocytoma)	7	—	—	—	1	1	8	17	25	25	—
204	Leukæmia and aleukæmia	44	48	23	13	15	32	39	69	130	113	59
205	Mycosis fungoides	1	—	—	—	—	1	1	1	2	2	—
Others in 140–205	Remaining sites	58	3	1	1	4	14	49	121	210	358	467
140–205	Total	1,833	105	55	59	202	702	1,818	3,574	6,250	10,536	13,197
193	Malignant neoplasm of brain and other parts of nervous system	46	25	21	13	27	42	79	108	66	31	13
223	Benign neoplasm of brain and other parts of nervous system											
237	Neoplasm of unspecified nature of brain and other parts of nervous system											

Table LXXXII.—Cancer (6th Revision, Nos. 140-205): deaths by sex and age, according to histological type, and death rates per million living, 1953

All ages		0—	15—	35—	45—	55—	65 and over	
Number of deaths								
All malignant neoplasms ..	{M	45,935	402	867	1,804	6,255	11,630	24,977
	{F	41,989	348	822	2,272	5,808	9,302	23,437

Carcinomata	{M	40,410	33	341	1,290	5,357	10,356	23,033
	{F	37,372	19	468	1,898	5,124	8,327	21,536
Gliomata	{M	667	54	78	100	193	174	68
	{F	499	59	62	71	127	124	56
Sarcomata	{M	854	67	143	95	128	163	258
	{F	868	82	91	62	121	176	336
“ Reticuloses”	{M	2,341	240	290	263	371	513	664
	{F	1,819	181	185	170	256	366	661
Undefined..	{M	1,663	8	15	56	206	424	954
	{F	1,431	7	16	71	180	309	848
Death rate per million persons living								
All malignant neoplasms ..	..	1,993	76	141	640	1,944	4,478	9,731

Carcinomata	..	1,763	5	67	500	1,689	3,997	8,959

Gliomata ..	..	26	11	12	27	52	64	25

Sarcomata	..	39	15	19	25	40	73	119

“ Reticuloses ”	..	94	43	40	68	101	188	266

Undefined..	..	70	2	3	20	62	157	362

Table LXXXIII.—Cancer of the lung, bronchus and pleura (6th Revision, Nos. 162 and 163) : standardised mortality ratios in the City of London and in each Metropolitan Borough for the period 1950-53

	<i>Standard :—</i>			
	<i>England and Wales</i> = 100		<i>London Admin. County</i> = 100	
	Males	Females	Males	Females
City of London	98	—	62	—
Battersea	145	129	93	86
Bermondsey	175	121	112	80
Bethnal Green	223	145	142	97
Camberwell	151	107	97	72
Chelsea	160	112	102	74
Deptford	160	85	103	56
Finsbury	200	190	128	125
Fulham	144	135	93	90
Greenwich	130	133	83	87
Hackney	152	152	98	102
Hammersmith	160	141	103	94
Hampstead	154	192	99	128
Holborn	138	232	88	151
Islington	187	160	120	107
Kensington	141	175	90	116
Lambeth	143	170	91	114
Lewisham	127	95	81	64
Paddington	171	172	110	114
Poplar	167	232	107	155
St. Marylebone	134	124	86	84
St. Pancras	202	179	129	119
Shoreditch	192	228	123	153
Southwark	182	180	117	120
Stepney	161	165	103	110
Stoke Newington	152	112	98	76
Wandsworth	140	151	90	100
Westminster	123	155	79	103
Woolwich	141	173	90	115

Table LXXXIV.—Deaths by sex from
cancer of certain sites in
the period 1950-53

{
London, City of London, Metropolitan
Boroughs, County Boroughs, and Aggre-
gates of other Urban and of Rural
Districts in each Admin. County
}

Int. Classn. No.	Site		England and Wales	Aggregates of:—			London Administrative County	City of London	Battersea	Bermondsey	Bethnal Green
				County Boroughs	Other Urban Areas (excluding London Admin. County)	Rural Districts					
150	Œsophagus	{ M	5,808	1,918	2,322	1,036	532	—	22	9	13
		{ F	3,402	1,053	1,364	706	279	—	13	7	2
151	Stomach	{ M	32,278	10,622	13,232	6,001	2,423	6	91	51	43
		{ F	25,490	8,436	10,708	4,430	1,916	1	67	39	42
153	Large intestine except rectum	{ M	16,893	5,283	7,233	3,256	1,121	4	30	12	15
		{ F	22,498	7,105	9,721	3,999	1,673	2	52	30	33
154	Rectum	{ M	13,972	4,448	5,707	2,683	1,134	1	37	24	21
		{ F	9,776	3,245	4,035	1,611	885	1	35	14	16
157	Pancreas	{ M	6,634	2,070	2,761	1,242	561	2	20	16	12
		{ F	5,855	1,813	2,476	1,049	517	3	18	8	12
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M	489	162	190	90	47	—	3	1	3
		{ F	372	125	139	67	41	—	—	—	—
161	Larynx	{ M	3,103	1,095	1,258	418	332	2	11	6	2
		{ F	741	237	317	142	45	—	1	—	—
162, 163	Lung and bronchus ..	{ M	46,282	16,511	18,502	5,987	5,282	8	169	104	129
		{ F	8,556	2,831	3,485	1,208	1,032	—	31	13	16
180	Kidney	{ M	2,487	753	1,022	435	277	4	6	5	5
		{ F	1,710	555	732	261	162	—	4	2	5
181	Bladder and other urinary organs	{ M	7,177	2,364	2,887	1,203	723	1	10	19	11
		{ F	3,054	985	1,268	470	331	—	9	2	6
191	Skin (other)	{ M	1,543	478	606	372	87	—	1	3	—
		{ F	1,214	384	518	231	81	—	5	1	1
196	Bone (including jaw bone)	{ M	1,695	542	678	343	132	—	2	3	1
		{ F	1,266	404	521	241	100	—	1	1	6
200	Lymphosarcoma and reticulosarcoma ..	{ M	1,709	487	699	306	217	—	6	2	3
		{ F	1,126	338	474	162	152	—	9	5	1
201	Hodgkin's disease ..	{ M	1,857	619	756	330	152	—	5	4	—
		{ F	1,091	333	468	204	86	—	1	1	1
204	Leukæmia and aleukæmia	{ M	4,196	1,293	1,734	798	371	1	13	6	4
		{ F	3,727	1,116	1,586	677	348	1	9	3	7

Table LXXXIV.—continued—Metropolitan Boroughs

Int. Classn. No.	Site		Camberwell	Chelsea	Deptford	Finsbury	Fulham	Greenwich	Hackney	Hammersmith	Hampstead	Holborn
150	Œsophagus	{ M 25 F 12	18 6	9 8	9 5	16 4	14 3	25 18	15 11	12 9	2 1	
151	Stomach	{ M 132 F 113	33 25	60 41	27 31	81 59	66 46	116 120	100 69	52 66	18 13	
153	Large intestine except rectum	{ M 63 F 87	23 27	22 33	8 18	43 54	18 38	56 65	51 44	41 73	10 9	
154	Rectum	{ M 61 F 40	19 13	35 18	14 13	48 39	30 21	47 44	45 37	21 31	7 4	
157	Pancreas	{ M 20 F 16	11 4	8 7	9 5	20 17	16 15	30 28	14 13	19 23	6 2	
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M 2 F 2	— 2	— —	— 1	1 —	1 1	1 4	1 —	2 —	1 1	
161	Larynx	{ M 14 F 1	7 3	6 —	1 —	19 3	7 —	12 4	14 2	8 1	1 —	
162, 163	Lung and bronchus ..	{ M 272 F 40	77 14	128 12	74 13	185 35	114 21	266 51	193 32	141 44	38 12	
180	Kidney	{ M 7 F 6	2 2	5 3	4 —	13 7	3 5	18 7	11 7	13 6	2 3	
181	Bladder and other urinary organs	{ M 44 F 25	9 8	16 5	11 2	24 13	23 9	30 13	29 11	21 12	4 —	
191	Skin (other)	{ M 5 F 5	1 2	2 —	— 1	3 3	1 2	5 4	4 1	3 2	1 —	
196	Bone (including jaw bone)	{ M 7 F 8	2 1	4 1	2 1	5 4	3 6	6 3	5 —	2 2	2 1	
200	Lymphosarcoma and reticulosarcoma ...	{ M 12 F 7	5 —	6 2	1 2	11 6	7 2	10 11	5 3	7 4	2 1	
201	Hodgkin's disease ..	{ M 6 F 1	4 2	3 —	3 —	5 4	2 2	9 3	3 5	7 2	1 —	
204	Leukæmia and aleukæmia	{ M 20 F 12	7 14	10 10	4 3	12 10	18 11	18 22	10 11	14 15	3 6	

Int. Classn. No.	Site				Islington	Kensington	Lambeth	Lewisham	Paddington	Poplar	St. Marylebone	St. Pancras	Shoreditch	Southwark
150	Œsophagus	..	..	{ M	34	30	35	45	23	13	9	21	5	14
				{ F	20	14	20	13	15	6	6	17	3	5
151	Stomach	..	..	{ M	176	93	151	144	110	53	43	99	40	88
				{ F	132	78	105	96	70	51	38	68	24	59
153	Large intestine except rectum			{ M	85	39	85	80	34	27	25	35	20	29
				{ F	116	89	127	120	74	34	46	57	15	47
154	Rectum	..	..	{ M	97	37	62	74	47	24	24	48	9	28
				{ F	51	39	68	70	34	13	15	37	7	23
157	Pancreas	..	..	{ M	40	18	28	39	26	14	19	32	3	8
				{ F	40	21	26	34	17	12	12	25	7	12
160	Nose, nasal cavities, middle ear and accessory sinuses			{ M	5	—	2	5	2	2	1	3	2	1
				{ F	5	3	2	4	4	—	—	1	1	2
161	Larynx	..	..	{ M	15	14	29	10	15	7	11	17	4	19
				{ F	4	5	2	1	1	—	—	2	—	1
162, 163	Lung and bronchus	..		{ M	440	209	332	295	210	120	118	298	83	177
				{ F	76	67	78	43	45	29	24	49	19	32
180	Kidney	..	..	{ M	11	17	21	12	10	2	3	12	2	11
				{ F	17	9	6	7	9	6	6	9	4	6
181	Bladder and other urinary organs	..	..	{ M	53	26	53	50	26	25	18	34	14	22
				{ F	27	19	21	18	14	8	6	20	5	14
191	Skin (other)	..	..	{ M	1	3	5	7	3	1	2	4	1	5
				{ F	2	4	6	8	2	1	2	2	2	5
196	Bone (including jaw bone)			{ M	8	6	9	9	6	5	3	4	1	4
				{ F	12	8	5	5	5	2	1	4	3	2
200	Lymphosarcoma and reticulosarcoma			{ M	24	10	15	10	7	3	2	11	1	4
		..		{ F	7	12	10	12	4	2	2	6	2	7
201	Hodgkin's disease	..		{ M	7	6	11	6	4	5	6	14	1	3
				{ F	7	5	6	9	3	—	2	6	3	4
204	Leukæmia and aleukæmia			{ M	24	11	21	25	16	8	15	12	2	7
				{ F	25	13	22	23	12	6	13	15	5	8

Table LXXXIV.—*continued*—Metropolitan Boroughs—County Boroughs

Int. Classn. No.	Site				Stepney	Stoke Newington	Wandsworth	Westminster	Woolwich	Barnsley	Barrow-in-Furness	Bath	Birkenhead	Birmingham
150	Œsophagus	..	..	{ M	24	7	47	18	18	6	13	6	25	121
				{ F	10	2	28	7	14	1	6	7	20	64
151	Stomach	..	..	{ M	101	31	250	60	108	55	66	62	117	728
				{ F	66	37	232	51	77	37	29	59	91	605
153	Large intestine except rectum			{ M	48	17	117	36	48	26	29	30	56	417
				{ F	48	23	193	44	75	34	40	48	82	578
154	Rectum	..	..	{ M	46	15	135	30	48	25	23	28	35	379
				{ F	24	10	109	22	37	24	13	23	31	288
157	Pancreas	..	..	{ M	22	7	55	21	26	16	9	16	21	117
				{ F	22	3	76	19	20	7	7	15	17	100
160	Nose, nasal cavities, middle ear and accessory sinuses			{ M	2	—	4	2	—	2	2	1	2	12
				{ F	1	—	4	1	2	—	—	—	2	11
161	Larynx	..	..	{ M	7	1	39	15	19	2	3	13	10	79
				{ F	3	—	6	2	3	2	2	1	1	16
162, 163	Lung and bronchus	..		{ M	169	71	501	138	223	66	76	88	183	1,439
				{ F	27	10	115	34	50	8	8	9	29	227
180	Kidney	..	..	{ M	10	8	31	15	14	3	2	6	7	50
				{ F	2	2	15	3	4	7	3	8	7	48
181	Bladder and other urinary organs	..	..	{ M	23	9	65	24	29	11	8	10	29	209
				{ F	6	8	28	13	9	2	6	10	11	71
191	Skin (other)	..	..	{ M	1	1	15	2	7	1	5	3	7	38
				{ F	2	2	10	—	6	2	4	1	4	26
196	Bone (including jaw bone)			{ M	6	—	14	6	7	3	3	1	4	36
				{ F	2	2	9	1	4	1	1	—	6	33
200	Lymphosarcoma and reticulosarcoma	..		{ M	7	4	22	13	7	1	2	4	5	42
				{ F	5	2	14	3	11	1	1	1	4	27
201	Hodgkin's disease	..		{ M	5	—	19	8	5	4	4	2	5	31
				{ F	2	2	10	3	2	—	—	3	1	23
204	Leukæmia and aleukæmia			{ M	11	8	30	20	21	1	5	9	16	103
				{ F	7	4	33	15	13	5	5	7	12	80

Int. Classn. No.	Site				Blackburn	Blackpool	Bolton	Bootle	Bournemouth	Bradford	Brighton	Bristol	Burnley	Burton upon Trent
150	Œsophagus	..	..	{ M	25	23	19	10	23	41	32	62	17	13
				{ F	11	15	14	3	17	21	15	44	3	4
151	Stomach	..	..	{ M	100	127	170	50	113	233	133	329	84	33
				{ F	101	129	131	35	103	191	114	247	60	23
153	Large intestine except rectum			{ M	63	81	77	17	86	135	69	147	42	16
				{ F	64	95	115	27	132	201	115	180	64	24
154	Rectum	..	..	{ M	51	56	59	15	49	78	65	137	33	35
				{ F	23	39	46	16	49	84	67	91	22	14
157	Pancreas	..	..	{ M	25	25	22	8	26	36	26	64	15	10
				{ F	15	34	28	4	31	49	36	63	14	8
160	Nose, nasal cavities, middle ear and accessory sinuses			{ M	4	—	1	1	3	4	3	3	—	1
				{ F	2	1	5	2	2	2	1	2	1	2
161	Larynx	..	..	{ M	10	10	16	16	15	17	11	29	7	4
				{ F	1	4	7	—	5	5	3	7	—	1
162, 163	Lung and bronchus	..		{ M	117	189	190	92	178	339	222	525	86	36
				{ F	25	43	26	17	45	65	38	90	16	5
180	Kidney	..	..	{ M	2	6	6	—	12	18	9	22	2	3
				{ F	5	13	4	1	6	11	7	20	2	1
181	Bladder and other urinary organs	..	..	{ M	17	26	21	3	35	54	32	64	14	10
				{ F	11	15	9	6	20	23	20	28	5	2
191	Skin (other)	..	..	{ M	5	3	10	—	5	7	5	15	4	3
				{ F	3	3	2	—	2	9	4	16	3	—
196	Bone (including jaw bone)			{ M	9	5	5	1	8	10	10	19	1	2
				{ F	6	3	2	4	8	8	7	9	6	1
200	Lymphosarcoma and reticulosarcoma	..		{ M	5	10	2	2	7	11	6	14	—	2
				{ F	—	3	5	2	3	4	10	16	2	1
201	Hodgkin's disease	..		{ M	7	7	9	—	6	18	6	19	6	3
				{ F	7	1	3	1	7	12	5	10	2	—
204	Leukæmia and aleukæmia			{ M	9	14	11	9	23	36	16	33	5	3
				{ F	10	7	11	7	22	23	15	34	5	4

Table LXXXIV.—continued—County Boroughs

Int. Classn. No.	Site		Bury	Canterbury	Carlisle	Chester	Coventry	Croydon	Darlington	Derby	Dewsbury	Doncaster
150	Œsophagus	{ M 14 F 6	5	10	8	27	31	6	29	7	13	
151	Stomach	{ M 51 F 42	15	48	50	140	141	74	107	42	61	
		{ M 42 F 10	36	32	105	168	58	69	45	34		
153	Large intestine except rectum	{ M 20 F 36	6	29	18	64	82	32	42	25	40	
154	Rectum	{ M 17 F 12	6	22	13	82	78	35	49	15	22	
		{ M 12 F 2	11	12	56	57	36	25	18	21		
157	Pancreas	{ M 4 F 9	3	11	7	39	44	17	19	6	9	
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M 1 F —	—	1	—	3	—	1	4	—	1	
		{ M 1 F —	—	1	—	3	—	1	4	—	1	
161	Larynx	{ M 7 F —	3	4	6	24	20	9	15	8	2	
162, 163	Lung and bronchus ..	{ M 52 F 20	21	62	58	253	282	74	143	47	90	
		{ M 20 F 5	9	14	42	53	14	21	10	18		
180	Kidney	{ M 3 F —	2	5	—	14	15	9	10	5	5	
181	Bladder and other urinary organs	{ M 15 F 4	2	12	3	35	41	8	24	8	21	
		{ M 4 F —	5	5	10	29	11	11	2	3		
191	Skin (other)	{ M — F 3	3	1	2	4	8	1	3	2	2	
196	Bone (including jaw bone)	{ M 1 F 1	—	6	2	10	9	4	4	1	6	
		{ M 1 F —	3	5	5	13	1	2	1	2		
200	Lymphosarcoma and reticulosarcoma ..	{ M 1 F 1	1	—	1	6	17	—	4	2	2	
201	Hodgkin's disease ..	{ M 8 F 2	1	1	—	7	18	3	10	2	3	
		{ M 2 F —	1	1	—	8	12	5	3	1	2	
204	Leukæmia and aleukæmia	{ M 6 F 5	3	5	4	24	29	5	18	9	8	
		{ M 5 F —	3	5	4	19	29	4	14	4	6	

Int. Classn. No.	Site		Dudley	Eastbourne	East Ham	Exeter	Gateshead	Gloucester	Great Yarmouth	Grimsby	Halifax	Hastings
150	Œsophagus	{ M 4 F 1	12	11	13	23	9	7	14	71	6	
151	Stomach	{ M 58 F 32	37	106	60	98	54	26	62	103	46	
		{ M 32 F 10	73	46	74	33	29	41	93	46		
153	Large intestine except rectum	{ M 14 F 28	27	43	30	45	28	15	40	44	35	
154	Rectum	{ M 16 F 8	17	31	24	36	23	23	32	36	27	
		{ M 16 F 8	19	26	21	19	16	24	22	25	39	
157	Pancreas	{ M 11 F 3	11	22	16	11	10	11	13	19	13	
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M 2 F —	—	2	—	1	—	2	2	1	1	
161	Larynx	{ M 1 F —	7	10	9	10	6	6	8	3	6	
162, 163	Lung and bronchus ..	{ M 42 F 9	64	166	61	126	55	50	107	105	78	
		{ M 12 F 32	12	32	12	29	6	10	14	23	20	
180	Kidney	{ M 3 F 1	7	4	3	5	2	2	5	1	7	
181	Bladder and other urinary organs	{ M 5 F 3	4	20	8	20	7	12	10	22	12	
		{ M 3 F —	7	11	6	4	2	5	6	13	12	
191	Skin (other)	{ M 2 F —	1	2	4	3	3	—	—	4	4	
196	Bone (including jaw bone)	{ M 3 F 2	4	2	1	11	—	3	2	6	1	
		{ M 2 F —	2	—	—	7	—	2	1	3	7	
200	Lymphosarcoma and reticulosarcoma ..	{ M — F 1	2	4	6	3	2	—	4	1	4	
201	Hodgkin's disease ..	{ M 3 F —	3	7	2	5	4	2	3	1	2	
		{ M 3 F —	3	2	4	1	1	—	6	3	4	
204	Leuk æmia and aleuk æmia	{ M 6 F 2	5	19	4	10	6	6	4	11	8	
		{ M 5 F —	7	16	5	12	5	1	2	7	13	

Table LXXXIV.—*continued*—County Boroughs

Int. Classn. No.	Site		Huddersfield	Ipswich	Kingston upon Hull	Leeds	Leicester	Lincoln	Liverpool	Manchester	Middlesbrough	Newcastle upon Tyne
150	Œsophagus	{M	20	19	47	56	38	10	120	87	24	55
		{F	8	8	22	27	19	9	78	56	19	32
151	Stomach	{M	91	68	206	375	165	56	581	574	109	250
		{F	96	50	177	332	166	25	538	445	83	201
153	Large intestine except rectum	{M	67	34	101	181	129	40	273	264	63	125
		{F	82	44	104	234	168	45	343	398	56	154
154	Rectum	{M	40	45	86	152	85	36	221	197	42	101
		{F	35	17	62	142	79	17	177	183	24	57
157	Pancreas	{M	19	16	62	86	43	7	117	99	22	49
		{F	19	17	31	45	40	7	102	104	14	43
160	Nose, nasal cavities, middle ear and accessory sinuses	{M	1	—	5	7	4	1	5	9	—	3
		{F	2	1	4	4	1	—	12	8	—	2
161	Larynx	{M	9	5	32	42	21	4	71	58	8	15
		{F	3	3	4	9	9	2	15	17	1	7
162, 163	Lung and bronchus ..	{M	125	108	373	696	298	61	1,158	1,073	173	369
		{F	20	22	74	118	43	12	203	173	31	70
180	Kidney	{M	8	4	20	32	17	3	41	36	8	21
		{F	5	6	7	25	7	1	27	26	8	11
181	Bladder and other urinary organs	{M	41	22	52	89	48	18	132	133	17	48
		{F	10	9	14	33	20	8	52	45	11	16
191	Skin (other)	{M	4	3	20	17	8	—	22	16	11	6
		{F	4	3	8	14	8	2	26	19	6	11
196	Bone (including jaw bone)	{M	4	3	10	22	11	4	17	28	7	10
		{F	4	4	5	20	12	2	20	16	2	9
200	Lymphosarcoma and reticulosarcoma ..	{M	4	2	19	20	10	4	34	16	5	8
		{F	2	4	14	15	11	1	19	14	2	6
201	Hodgkin's disease ..	{M	9	4	13	26	9	5	36	32	6	19
		{F	1	5	7	14	7	2	22	22	4	4
204	Leukæmia and aleukæmia	{M	16	11	21	43	22	10	81	57	11	27
		{F	12	8	16	42	28	5	74	67	15	24

Int. Classn. No.	Site		Northampton	Norwich	Nottingham	Oldham	Oxford	Plymouth	Portsmouth	Preston	Reading	Rochdale
150	Œsophagus	{M	11	21	31	21	15	20	36	12	15	9
		{F	9	9	11	7	8	32	13	11	8	6
151	Stomach	{M	83	87	202	133	65	155	180	99	72	90
		{F	60	78	154	100	41	123	124	64	61	76
153	Large intestine except rectum	{M	49	51	102	61	33	74	82	51	49	38
		{F	63	90	153	67	49	80	122	61	57	44
154	Rectum	{M	32	44	90	49	25	64	80	36	49	31
		{F	18	32	62	23	23	40	57	24	23	19
157	Pancreas	{M	15	23	54	9	11	34	36	21	7	18
		{F	12	25	45	14	9	26	39	21	14	12
160	Nose, nasal cavities, middle ear and accessory sinuses	{M	2	1	8	1	3	2	—	—	2	—
		{F	1	1	4	—	1	3	4	1	—	—
161	Larynx	{M	7	11	36	12	8	12	26	7	5	8
		{F	2	3	3	2	1	2	3	3	1	2
162, 163	Lung and bronchus ..	{M	100	132	373	120	137	180	255	121	131	86
		{F	14	31	43	26	20	27	48	21	25	26
180	Kidney	{M	5	7	14	4	10	11	14	9	6	4
		{F	5	10	9	6	2	5	15	2	7	7
181	Bladder and other urinary organs	{M	16	21	48	18	18	47	35	11	23	17
		{F	12	12	22	8	7	19	20	6	10	5
191	Skin (other)	{M	5	—	7	6	3	9	8	7	4	6
		{F	3	5	9	4	1	7	3	2	6	2
196	Bone (including jaw bone)	{M	5	5	16	2	4	14	9	3	3	4
		{F	1	3	1	4	1	9	9	9	4	4
200	Lymphosarcoma and reticulosarcoma ..	{M	3	6	20	2	4	8	11	2	7	1
		{F	1	1	7	3	4	6	1	2	4	1
201	Hodgkin's disease ..	{M	—	8	13	2	4	10	9	5	3	9
		{F	2	1	7	2	3	5	2	3	2	—
204	Leukæmia and aleukæmia	{M	11	17	29	11	11	21	19	5	10	7
		{F	8	14	19	5	10	15	21	8	10	6

Table LXXXIV.—*continued*—County Boroughs

Int. Classn. No.	Site		Rotherham	St. Helens	Salford	Sheffield	Smethwick	Southampton	Southend-on-Sea	Southport	South Shields	Stockport
150	Œsophagus	{M	8	19	25	52	13	39	21	10	26	18
		{F	2	8	11	19	3	14	16	14	11	11
151	Stomach	{M	80	84	182	400	48	128	113	86	107	117
		{F	50	57	119	306	39	107	94	79	86	111
153	Large intestine except rectum	{M	29	34	76	198	27	66	56	36	32	69
		{F	42	44	127	255	40	110	107	73	40	70
154	Rectum	{M	29	26	61	201	31	69	49	39	36	50
		{F	21	19	30	118	21	36	44	23	24	37
157	Pancreas	{M	13	21	31	92	12	32	28	18	12	20
		{F	9	9	24	72	6	29	29	14	9	19
160	Nose, nasal cavities, middle ear and accessory sinuses	{M	—	2	1	10	—	2	4	1	—	2
		{F	—	1	1	7	—	3	2	1	—	—
161	Larynx	{M	7	7	14	55	7	16	13	1	5	8
		{F	2	—	2	4	2	3	1	2	—	4
162, 163	Lung and bronchus ..	{M	75	118	274	680	98	230	242	122	137	169
		{F	15	17	45	103	16	29	49	23	31	37
180	Kidney	{M	5	4	10	33	5	10	15	4	6	10
		{F	4	4	5	15	1	11	10	4	8	4
181	Bladder and other urinary organs	{M	17	19	33	87	11	39	44	14	18	23
		{F	4	2	18	41	4	9	19	8	3	10
191	Skin (other)	{M	2	2	8	20	3	9	4	5	3	5
		{F	2	1	7	7	1	3	3	7	3	2
196	Bone (including jaw bone)	{M	3	4	5	23	6	8	4	—	11	8
		{F	3	4	5	11	2	10	2	5	5	7
200	Lymphosarcoma and reticulosarcoma ..	{M	2	5	3	14	8	10	7	1	3	2
		{F	2	1	1	8	1	1	6	4	4	4
201	Hodgkin's disease ..	{M	8	1	11	24	5	5	7	7	3	7
		{F	—	2	6	12	—	3	6	1	3	8
204	Leukæmia and aleukæmia	{M	5	10	16	66	11	20	7	4	10	10
		{F	9	9	8	41	6	14	8	7	11	18

Int. Classn. No.	Site		Stoke on Trent	Sunderland	Tynemouth	Wakefield	Wallasey	Walsall	Warrington	West Bromwich	West Ham	West Hartlepool
150	Œsophagus	{M	46	18	10	4	27	14	13	12	26	10
		{F	17	11	4	1	18	9	6	4	7	4
151	Stomach	{M	263	193	56	46	70	76	87	53	137	61
		{F	192	121	47	40	67	48	57	45	87	40
153	Large intestine except rectum	{M	105	67	22	23	46	35	34	35	50	31
		{F	131	70	31	31	49	49	31	23	66	34
154	Rectum	{M	94	70	21	14	27	46	21	24	46	20
		{F	53	42	19	11	27	24	10	18	30	9
157	Pancreas	{M	55	29	4	8	19	16	11	7	27	12
		{F	37	16	7	12	21	13	11	8	20	7
160	Nose, nasal cavities, middle ear and accessory sinuses	{M	8	2	1	1	—	—	1	—	—	—
		{F	3	—	1	1	1	2	—	1	1	1
161	Larynx	{M	26	16	2	3	6	4	10	8	10	4
		{F	4	2	1	1	5	—	1	1	—	3
162, 163	Lung and bronchus ..	{M	335	205	84	60	127	131	97	99	242	82
		{F	56	36	11	5	21	24	8	11	36	14
180	Kidney	{M	8	4	2	4	4	9	6	3	17	4
		{F	9	11	4	2	7	3	6	4	4	2
181	Bladder and other urinary organs	{M	38	26	13	9	21	19	11	21	42	10
		{F	12	5	3	6	14	14	1	8	17	3
191	Skin (other)	{M	8	8	3	—	4	4	6	2	6	5
		{F	6	9	4	—	3	4	—	2	1	3
196	Bone (including jaw bone)	{M	12	11	4	3	6	5	4	3	7	3
		{F	12	2	4	1	5	2	—	2	4	1
200	Lymphosarcoma and reticulosarcoma ..	{M	6	7	6	—	2	3	7	1	14	—
		{F	6	4	—	2	5	2	3	2	6	3
201	Hodgkin's disease ..	{M	12	8	2	1	5	3	4	2	12	2
		{F	5	5	1	—	4	1	1	1	4	1
204	Leukæmia and aleukæmia	{M	19	16	7	5	13	14	4	10	13	9
		{F	26	11	3	3	8	12	7	6	15	6

Table LXXXIV.—*continued*—County Boroughs, Urban and Rural Aggregates of Administrative Counties.

Int. Classn. No.	Site			Wigan	Wolverhampton	Worcester	York	Cardiff	Merthyr Tydfil	Newport (Mon.)	Swansea	Bedfordshire	
												U.	R.
150	Œsophagus	{	M	10	16	11	11	43	13	14	30	24	11
			F	1	8	3	8	25	6	4	21	9	4
151	Stomach	{	M	72	109	37	83	214	83	71	146	103	70
			F	47	81	35	60	145	49	47	131	81	43
153	Large intestine except rectum	{	M	26	67	21	43	70	24	40	84	70	33
			F	25	88	37	61	127	21	33	88	86	38
154	Rectum	{	M	21	46	22	39	66	18	32	53	58	38
			F	20	41	22	22	41	13	27	30	46	15
157	Pancreas	{	M	14	14	9	16	34	11	13	12	28	17
			F	10	9	7	13	29	7	12	18	30	11
160	Nose, nasal cavities, middle ear and accessory sinuses	{	M	1	2	1	3	1	—	1	5	2	1
			F	—	—	—	1	—	1	—	3	2	1
161	Larynx	{	M	9	13	1	9	14	6	4	14	19	9
			F	3	1	1	1	7	—	4	3	3	2
162, 163	Lung and bronchus ..	{	M	79	148	53	109	281	55	116	232	241	85
			F	16	23	12	24	48	4	20	26	38	11
180	Kidney	{	M	5	9	1	9	16	3	7	7	5	6
			F	13	8	—	3	6	1	2	3	4	3
181	Bladder and other urinary organs	{	M	16	15	3	21	51	8	20	29	35	14
			F	5	14	4	4	21	—	4	5	11	8
191	Skin (other)	{	M	1	6	2	5	13	3	6	9	1	3
			F	7	4	1	8	7	3	2	8	5	1
196	Bone (including jaw bone)	{	M	—	2	1	2	12	7	4	10	9	3
			F	1	5	—	2	5	2	5	6	7	2
200	Lymphosarcoma and reticulosarcoma ..	{	M	1	2	1	7	7	2	5	4	7	6
			F	2	—	1	1	8	2	2	7	5	—
201	Hodgkin's disease ..	{	M	6	6	—	7	13	2	3	12	10	4
			F	1	3	2	4	8	—	3	5	4	3
204	Leukæmia and aleukæmia	{	M	5	12	11	14	26	2	13	18	22	12
			F	7	13	6	7	16	7	6	9	17	13

Int. Classn. No.	Site			Berkshire		Buckinghamshire		Cambridge-shire		Cheshire		Cornwall	
				U.	R.	U.	R.	U.	R.	U.	R.	U.	R.
150	Œsophagus	{	M	19	32	25	23	11	10	81	27	21	22
			F	9	7	9	18	12	5	47	16	33	24
151	Stomach	{	M	72	125	112	96	39	53	505	167	159	110
			F	48	88	93	95	53	50	423	88	159	115
153	Large intestine except rectum	{	M	34	70	65	66	36	51	274	73	101	66
			F	63	84	86	99	46	47	351	71	122	83
154	Rectum	{	M	44	51	54	53	21	41	164	52	52	60
			F	23	44	50	54	14	23	138	31	44	27
157	Pancreas	{	M	23	37	30	39	12	13	107	23	23	20
			F	16	32	28	29	15	14	77	13	28	13
160	Nose, nasal cavities, middle ear and accessory sinuses	{	M	2	2	2	4	1	—	2	2	1	1
			F	2	1	1	3	—	2	5	—	1	2
161	Larynx	{	M	5	14	13	16	9	4	48	10	13	8
			F	—	—	1	1	—	2	23	3	3	6
162, 163	Lung and bronchus ..	{	M	112	164	202	163	83	68	605	133	144	80
			F	22	31	34	39	8	15	112	37	38	19
180	Kidney	{	M	10	6	13	12	3	4	32	8	11	7
			F	6	6	4	8	3	2	21	2	8	6
181	Bladder and other urinary organs	{	M	19	38	27	31	13	16	96	28	34	16
			F	10	14	9	19	4	7	32	7	16	6
191	Skin (other)	{	M	3	4	5	7	2	3	17	9	4	10
			F	6	3	9	6	4	1	16	3	7	6
196	Bone (including jaw bone)	{	M	4	5	12	10	1	1	22	7	9	7
			F	4	2	2	5	3	4	29	5	2	5
200	Lymphosarcoma and reticulosarcoma ..	{	M	3	5	8	8	4	2	19	6	5	9
			F	1	4	7	5	5	2	10	7	4	7
201	Hodgkin's disease ..	{	M	2	8	6	13	3	2	25	9	11	6
			F	2	3	4	2	1	3	18	1	9	1
204	Leukæmia and aleukæmia	{	M	10	16	23	25	7	4	61	15	15	18
			F	15	11	18	17	9	5	54	13	21	17

Table LXXXIV.—continued—Urban and Rural Aggregates of Administrative Counties

Int. Classn. No.	Site		Cumber-land		Derbys-hire		Devon		Dorset		Durham	
			U.	R.	U.	R.	U.	R.	U.	R.	U.	R.
150	Œsophagus	{M	7	15	32	30	40	37	24	14	86	18
		{F	8	16	20	16	39	28	13	7	28	16
151	Stomach	{M	71	85	278	225	221	215	109	85	561	255
		{F	66	75	178	162	213	123	99	55	372	165
153	Large intestine except rectum	{M	31	53	144	102	150	107	79	48	242	115
		{F	37	48	170	147	202	146	131	55	282	138
154	Rectum	{M	28	36	132	99	104	67	63	41	192	90
		{F	16	23	93	51	89	56	46	23	103	42
157	Pancreas	{M	8	20	52	62	43	38	31	16	81	50
		{F	4	11	45	41	44	34	39	16	57	44
160	Nose, nasal cavities, middle ear and accessory sinuses	{M	—	—	3	5	3	4	2	4	3	2
		{F	—	1	3	2	2	—	1	3	5	3
161	Larynx	{M	8	5	24	19	24	7	13	2	31	11
		{F	1	2	2	3	4	7	5	1	12	2
162, 163	Lung and bronchus ..	{M	64	73	270	253	245	169	174	92	544	180
		{F	17	6	52	56	62	42	29	20	85	28
180	Kidney	{M	6	6	11	19	13	15	15	11	48	17
		{F	5	2	11	5	18	4	10	1	18	5
181	Bladder and other urinary organs	{M	17	12	45	41	42	36	34	13	90	48
		{F	2	7	18	18	30	15	11	4	25	16
191	Skin (other)	{M	9	9	12	8	16	15	8	7	24	16
		{F	2	7	9	8	13	3	8	1	16	10
196	Bone (including jaw bone)	{M	4	7	10	14	9	10	6	2	33	12
		{F	—	3	8	13	7	9	6	—	9	7
200	Lymphosarcoma and reticulosarcoma ..	{M	—	2	6	8	13	12	12	8	31	12
		{F	3	3	7	2	2	4	6	3	11	5
201	Hodgkin's disease ..	{M	6	2	11	10	9	5	9	4	21	5
		{F	1	4	13	7	6	7	7	4	12	5
204	Leuk æmia and aleuk æmia	{M	4	6	30	35	38	22	23	17	50	26
		{F	7	8	34	26	29	23	20	18	41	17

Int. Classn. No.	Site		Isle of Ely,		Essex		Glouces-ter-shire		Hereford-shire		Hertford-shire	
			U.	R.	U.	R.	U.	R.	U.	R.	U.	R.
150	Œsophagus	{M	7	3	171	35	22	28	8	13	51	16
		{F	1	2	91	18	10	15	9	6	30	11
151	Stomach	{M	49	35	937	183	102	187	34	39	267	101
		{F	41	11	721	131	93	142	25	34	238	87
153	Large intestine except rectum	{M	38	20	462	124	63	107	15	32	166	69
		{F	41	29	710	121	82	113	33	36	233	72
154	Rectum	{M	22	15	379	97	38	94	20	35	133	49
		{F	18	8	248	44	38	70	11	23	87	36
157	Pancreas	{M	6	7	181	42	22	37	9	12	64	26
		{F	4	2	155	24	19	45	8	8	53	22
160	Nose, nasal cavities, middle ear and accessory sinuses	{M	1	—	19	3	3	5	—	—	4	—
		{F	—	—	9	4	4	3	1	1	2	1
161	Larynx	{M	3	2	102	14	6	19	4	4	24	12
		{F	1	1	10	1	2	5	1	1	9	5
162, 163	Lung and bronchus ..	{M	53	36	1,569	207	149	199	33	36	470	164
		{F	5	5	302	47	27	33	5	11	85	25
180	Kidney	{M	2	2	64	15	5	15	1	2	10	6
		{F	4	1	61	12	9	12	3	3	12	6
181	Bladder and other urinary organs	{M	9	9	220	33	23	37	7	10	86	27
		{F	5	2	111	17	13	22	3	2	28	13
191	Skin (other)	{M	3	—	25	7	8	10	1	3	10	5
		{F	—	—	35	6	5	6	2	1	11	6
196	Bone (including jaw bone)	{M	1	2	46	6	4	9	2	2	8	6
		{F	1	1	33	9	6	7	3	2	10	2
200	Lymphosarcoma and reticulosarcoma ..	{M	—	—	50	11	9	16	1	1	19	3
		{F	2	1	42	7	9	8	—	1	17	3
201	Hodgkin's disease ..	{M	—	—	40	11	8	16	2	—	14	8
		{F	2	1	27	8	2	12	1	—	7	6
204	Leuk æmia and aleuk æmia	{M	5	3	147	25	8	24	7	15	38	12
		{F	3	3	105	19	14	21	6	3	29	12

Table LXXXIV.—*continued*—Urban and Rural Aggregates of Administrative Counties

Int. Classn. No.	Site		Huntingdonshire		Kent		Lancashire		Leicestershire		Lincolnshire (Parts of Holland)	
			U.	R.	U.	R.	U.	R.	U.	R.	U.	R.
150	Œsophagus	{ M	2	1	149	41	254	29	18	21	3	4
		{ F	3	2	105	27	146	21	4	9	2	3
151	Stomach	{ M	23	37	815	226	1,477	211	115	108	30	61
		{ F	23	11	652	170	1,265	174	73	93	26	38
153	Large intestine except rectum	{ M	18	15	455	123	801	115	61	71	19	29
		{ F	15	22	702	145	955	131	67	72	20	23
154	Rectum	{ M	14	20	407	115	571	72	60	49	18	22
		{ F	10	6	281	88	406	62	40	26	8	9
157	Pancreas	{ M	5	7	197	54	258	36	30	27	8	6
		{ F	4	5	164	47	253	37	18	24	6	5
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M	—	—	14	1	18	3	—	1	2	—
		{ F	1	—	8	6	13	3	1	4	—	—
161	Larynx	{ M	1	2	78	17	122	7	12	10	2	3
		{ F	—	2	23	6	35	10	2	2	2	1
162, 163	Lung and bronchus ..	{ M	21	32	1,299	309	1,779	225	150	119	23	31
		{ F	4	—	250	57	328	51	37	31	9	7
180	Kidney	{ M	4	3	92	16	90	12	6	8	1	—
		{ F	1	—	55	18	58	5	9	5	—	3
181	Bladder and other urinary organs	{ M	6	8	207	64	256	44	26	22	13	7
		{ F	3	1	96	19	119	15	9	9	1	2
191	Skin (other)	{ M	1	2	43	22	65	8	7	4	3	1
		{ F	3	1	32	5	46	6	1	6	1	3
196	Bone (including jaw bone)	{ M	—	1	38	14	78	20	7	11	1	2
		{ F	—	—	44	5	50	5	5	7	2	1
200	Lymphosarcoma and reticulosarcoma ..	{ M	—	—	46	18	50	10	3	7	1	1
		{ F	1	—	38	4	38	5	2	3	1	1
201	Hodgkin's disease ..	{ M	1	—	54	17	85	10	6	11	2	3
		{ F	—	2	24	9	38	8	4	2	1	—
204	Leukæmia and aleukæmia	{ M	4	4	116	36	136	28	15	13	3	10
		{ F	2	6	146	34	138	20	13	11	5	2

Int. Classn. No.	Site		Lincolnshire (Parts of Kesteven)		Lincolnshire (Parts of Lindsey)		Middlesex		Norfolk		Northamptonshire	
			U.	R.	U.	R.	U.	R.	U.	R.	U.	R.
150	Œsophagus	{ M	9	13	20	27	271	—	8	37	19	11
		{ F	5	4	15	14	155	—	9	27	10	6
151	Stomach	{ M	36	55	110	78	1,261	—	62	209	96	68
		{ F	30	30	67	68	1,121	—	43	168	84	54
153	Large intestine except rectum	{ M	21	28	66	62	710	—	42	136	53	49
		{ F	31	42	76	84	1,101	—	46	156	66	58
154	Rectum	{ M	24	28	49	50	595	—	30	94	40	41
		{ F	12	11	39	35	508	—	28	74	35	24
157	Pancreas	{ M	8	4	22	25	336	—	8	38	24	23
		{ F	6	10	18	18	326	—	16	43	23	19
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M	—	1	3	2	23	—	2	3	—	1
		{ F	1	—	3	1	16	—	—	3	1	—
161	Larynx	{ M	7	4	6	5	138	—	8	15	10	9
		{ F	—	—	4	3	27	—	5	7	2	3
162, 163	Lung and bronchus ..	{ M	40	38	133	83	2,852	—	43	175	123	79
		{ F	12	10	22	20	538	—	8	44	20	23
180	Kidney	{ M	1	3	11	9	124	—	4	13	5	5
		{ F	—	4	8	4	102	—	7	7	7	4
181	Bladder and other urinary organs	{ M	5	6	30	24	353	—	19	39	16	22
		{ F	3	4	11	7	181	—	6	25	11	6
191	Skin (other)	{ M	—	2	1	6	43	—	2	15	6	6
		{ F	3	2	3	3	45	—	1	9	3	1
196	Bone (including jaw bone)	{ M	2	3	2	6	67	—	4	10	8	2
		{ F	2	—	8	2	49	—	4	14	3	1
200	Lymphosarcoma and reticulosarcoma ..	{ M	—	1	5	6	110	—	2	10	1	3
		{ F	1	—	7	3	68	—	—	5	3	4
201	Hodgkin's disease ..	{ M	2	7	6	5	113	—	2	11	7	4
		{ F	2	—	2	4	73	—	1	9	2	6
204	Leukæmia and aleukæmia	{ M	5	8	13	19	211	—	7	24	11	10
		{ F	5	7	12	6	203	—	6	33	11	4

Table LXXXIV.—*continued*—Urban and Rural Aggregates of Administrative Counties

Int. Classn. No.	Site		North-berland		Notting-hamshire		Oxford-shire		Peter-borough, Soke of:		Rutland-shire	
			U.	R.	U.	R.	U.	R.	U.	R.	U.	R.
150	Œsophagus	{ M	27	9	33	17	5	12	4	1	1	1
		{ F	16	10	13	12	3	4	2	—	—	3
151	Stomach	{ M	305	95	261	105	26	78	42	6	7	9
		{ F	236	69	171	67	25	48	34	3	2	16
153	Large intestine except rectum	{ M	152	38	124	49	20	31	21	7	—	5
		{ F	147	41	143	57	22	47	29	2	1	8
154	Rectum	{ M	115	32	127	56	7	36	25	—	—	9
		{ F	53	20	76	24	7	23	12	—	—	1
157	Pancreas	{ M	47	10	56	23	8	10	7	2	1	2
		{ F	40	19	40	18	4	16	9	1	1	3
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M	2	—	—	2	—	1	—	—	—	—
		{ F	4	2	1	—	—	—	—	—	—	—
161	Larynx	{ M	19	8	17	7	3	3	8	1	—	—
		{ F	5	1	4	1	—	1	2	—	—	—
162, 163	Lung and bronchus ..	{ M	325	51	296	103	50	86	43	3	1	9
		{ F	53	12	49	18	13	21	10	—	1	3
180	Kidney	{ M	20	7	9	15	3	3	2	1	—	—
		{ F	11	4	11	6	2	4	1	—	—	1
181	Bladder and other urinary organs	{ M	53	18	60	15	11	25	6	—	—	2
		{ F	23	8	25	8	4	6	3	—	—	—
191	Skin (other)	{ M	9	3	8	7	1	2	2	—	—	—
		{ F	10	5	9	5	—	3	1	1	—	1
196	Bone (including jaw bone)	{ M	18	10	14	3	—	5	4	—	—	—
		{ F	12	3	5	6	1	3	1	—	—	—
200	Lymphosarcoma and reticulosarcoma ..	{ M	15	4	17	8	—	4	4	—	—	—
		{ F	2	2	10	3	1	4	1	—	—	—
201	Hodgkin's disease ..	{ M	23	5	20	6	—	4	—	—	1	—
		{ F	7	5	14	6	2	1	2	1	—	—
204	Leukæmia and aleukæmia	{ M	26	3	32	18	10	10	9	—	—	—
		{ F	22	7	26	15	6	15	4	—	—	—

Int. Classn. No.	Site		Shropshire		Somerset		Southamp-ton		Stafford-shire		Suffolk, East	
			U.	R.	U.	R.	U.	R.	U.	R.	U.	R.
150	Œsophagus	{ M	25	24	25	38	52	40	72	26	20	21
		{ F	10	11	22	23	14	20	37	15	7	10
151	Stomach	{ M	85	107	173	212	219	171	446	145	66	75
		{ F	87	80	146	163	166	127	342	119	49	66
153	Large intestine except rectum	{ M	79	50	87	87	135	90	226	91	46	60
		{ F	66	67	137	128	192	124	286	97	50	69
154	Rectum	{ M	41	43	69	66	108	90	201	59	33	44
		{ F	34	21	47	35	69	43	135	29	26	20
157	Pancreas	{ M	24	22	34	29	51	50	92	26	18	28
		{ F	23	23	27	31	54	38	75	20	8	15
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M	1	—	5	1	2	3	9	—	2	5
		{ F	2	1	—	1	2	1	5	2	—	3
161	Larynx	{ M	5	5	19	17	33	17	38	12	7	7
		{ F	5	2	2	6	5	4	13	6	—	2
162, 163	Lung and bronchus ..	{ M	114	66	194	173	308	232	609	167	92	85
		{ F	18	12	55	35	60	49	80	28	24	18
180	Kidney	{ M	5	2	8	17	23	12	21	6	7	4
		{ F	2	4	14	4	15	14	19	3	1	2
181	Bladder and other urinary organs	{ M	15	14	36	35	60	46	72	25	32	29
		{ F	12	6	10	11	18	15	30	9	12	10
191	Skin (other)	{ M	12	11	6	10	17	15	17	14	3	5
		{ F	5	8	10	7	14	6	11	8	5	1
196	Bone (including jaw bone)	{ M	2	7	6	16	6	11	28	6	5	3
		{ F	2	3	8	6	7	7	22	5	6	1
200	Lymphosarcoma and reticulosarcoma ..	{ M	8	4	7	10	12	13	21	10	2	5
		{ F	4	3	6	9	7	2	11	3	3	5
201	Hodgkin's disease ..	{ M	5	5	8	9	11	6	24	3	4	5
		{ F	3	4	6	3	10	5	13	2	1	3
204	Leukæmia and aleukæmia	{ M	21	20	17	27	52	39	51	18	11	6
		{ F	10	13	18	23	32	31	49	13	7	15

Table LXXXIV.—*continued*—Urban and Rural Aggregates of Administrative Counties

Int. Classn. No.	Site		Suffolk, West		Surrey		Sussex, East		Sussex, West		Warwick-shire	
			U.	R.	U.	R.	U.	R.	U.	R.	U.	R.
150	Œsophagus	{ M	6	9	136	19	22	30	27	22	44	15
		{ F	8	8	82	10	23	18	24	16	13	11
151	Stomach	{ M	29	47	689	67	144	89	112	99	174	92
		{ F	25	34	554	53	118	73	125	78	146	81
153	Large intestine except rectum	{ M	25	37	399	56	97	61	86	69	116	57
		{ F	40	49	645	75	142	109	150	89	148	68
154	Rectum	{ M	19	26	326	47	56	50	60	62	101	61
		{ F	14	14	265	25	60	37	56	34	81	33
157	Pancreas	{ M	6	12	177	24	27	31	61	32	35	33
		{ F	3	7	195	22	49	37	48	24	52	14
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M	—	1	9	2	4	1	1	3	4	3
		{ F	—	—	11	1	1	—	5	2	—	—
161	Larynx	{ M	2	3	85	6	18	9	21	8	17	6
		{ F	—	1	14	1	3	5	3	—	2	1
162, 163	Lung and bronchus ..	{ M	37	41	1,389	156	223	138	196	155	309	130
		{ F	8	8	280	23	58	43	68	35	51	25
180	Kidney	{ M	3	8	79	11	8	13	13	14	14	9
		{ F	3	—	58	5	10	5	11	13	10	7
181	Bladder and other urinary organs	{ M	7	7	180	18	42	32	41	27	41	27
		{ F	3	3	86	10	32	15	21	11	23	7
191	Skin (other)	{ M	—	3	34	7	5	8	1	7	4	6
		{ F	—	5	33	4	9	4	4	2	6	7
196	Bone (including jaw bone)	{ M	3	2	30	7	10	7	6	3	10	10
		{ F	—	—	34	5	9	4	7	7	6	5
200	Lymphosarcoma and reticulosarcoma ..	{ M	2	4	62	7	4	5	7	7	16	7
		{ F	2	—	37	3	7	5	2	9	12	2
201	Hodgkin's disease ..	{ M	3	1	46	6	5	8	5	10	10	4
		{ F	1	—	37	3	10	8	4	10	5	2
204	Leuk æmia and aleuk æmia	{ M	8	7	137	18	14	18	24	14	34	15
		{ F	3	4	127	11	21	16	28	16	28	11

Int. Classn. No.	Site		Westmor-land		Wight, Isle of		Wiltshire		Worcestershire		York-shire, East Riding	
			U.	R.	U.	R.	U.	R.	U.	R.	U.	R.
150	Œsophagus	{ M	5	8	10	1	25	20	28	12	13	9
		{ F	6	4	8	2	11	14	13	6	8	6
151	Stomach	{ M	18	29	47	14	122	94	197	69	56	77
		{ F	18	23	47	9	78	68	137	56	64	53
153	Large intestine except rectum	{ M	19	9	41	11	67	50	124	36	63	41
		{ F	10	15	62	18	94	92	140	66	71	47
154	Rectum	{ M	10	7	29	11	63	61	108	40	29	37
		{ F	9	4	26	5	37	33	61	35	19	19
157	Pancreas	{ M	8	2	14	2	21	24	40	11	19	11
		{ F	4	1	4	1	21	19	30	14	9	14
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M	1	—	2	—	5	3	2	2	2	—
		{ F	—	—	1	—	2	2	5	2	—	—
161	Larynx	{ M	5	2	4	2	15	9	22	7	6	3
		{ F	—	2	3	1	4	2	5	2	2	1
162, 163	Lung and bronchus ..	{ M	38	22	84	17	158	118	251	79	102	80
		{ F	8	2	14	1	35	26	39	19	28	15
180	Kidney	{ M	1	3	8	—	8	7	15	4	9	7
		{ F	4	4	5	2	5	7	12	8	1	6
181	Bladder and other urinary organs	{ M	4	4	13	4	24	24	32	20	14	21
		{ F	—	3	5	—	10	9	13	2	10	8
191	Skin (other)	{ M	3	2	6	—	10	9	10	3	4	8
		{ F	3	1	5	1	4	6	11	4	5	2
196	Bone (including jaw bone)	{ M	2	2	2	—	6	6	6	8	5	3
		{ F	—	—	1	1	4	7	10	3	7	4
200	Lymphosarcoma and reticulosarcoma ..	{ M	1	2	2	—	6	4	15	2	4	5
		{ F	1	1	1	—	7	3	9	4	3	1
201	Hodgkin's disease ..	{ M	—	2	5	—	3	5	8	3	4	3
		{ F	2	—	3	1	1	7	5	1	4	3
204	Leuk æmia and aleuk æmia	{ M	3	1	19	3	12	21	28	6	8	8
		{ F	—	1	9	2	25	11	22	11	7	11

Table LXXXIV.—continued—Urban and Rural Aggregates of Administrative Counties

Int. Classn. No.	Site		York-shire, North Riding		York-shire, West Riding		Anglesey		Breck-nockshire		Caernar-vonshire	
			U.	R.	U.	R.	U.	R.	U.	R.	U.	R.
150	Œsophagus	{ M	35	20	126	40	2	5	3	5	9	18
		{ F	21	15	69	25	2	10	1	9	12	11
151	Stomach	{ M	149	112	952	300	21	42	25	39	115	95
		{ F	121	69	770	208	16	29	14	23	79	69
153	Large intestine except rectum	{ M	99	65	465	145	18	24	4	17	32	36
		{ F	137	75	610	185	11	27	8	15	54	41
154	Rectum	{ M	77	43	407	131	3	15	5	8	29	18
		{ F	44	23	258	68	3	11	4	8	23	10
157	Pancreas	{ M	32	26	156	53	2	2	3	6	15	5
		{ F	25	20	159	31	1	4	—	2	9	7
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M	1	1	15	5	—	1	1	—	—	—
		{ F	—	2	10	—	—	—	—	1	1	1
161	Larynx	{ M	16	3	81	23	3	2	3	—	6	2
		{ F	7	2	25	4	1	1	—	3	3	2
162, 163	Lung and bronchus ..	{ M	188	80	1,007	291	15	19	7	20	58	30
		{ F	24	17	188	50	3	4	—	6	21	6
180	Kidney	{ M	13	8	76	22	1	2	—	2	7	4
		{ F	7	5	49	4	—	2	2	2	2	4
181	Bladder and other urinary organs	{ M	29	20	203	50	4	4	2	6	10	4
		{ F	15	10	67	19	—	2	—	2	6	4
191	Skin (other)	{ M	15	3	57	18	—	2	—	3	4	2
		{ F	5	6	36	7	1	3	2	3	2	—
196	Bone (including jaw bone)	{ M	10	4	58	14	—	1	1	2	2	5
		{ F	14	9	27	18	1	1	1	—	2	3
200	Lymphosarcoma and reticulosarcoma ..	{ M	7	1	31	16	—	—	—	—	4	4
		{ F	7	1	22	4	1	—	1	—	5	1
201	Hodgkin's disease ..	{ M	6	7	49	13	—	5	1	3	4	1
		{ F	7	3	35	8	—	—	—	—	2	—
204	Leukæmia and aleukæmia	{ M	6	13	90	29	1	—	—	4	5	3
		{ F	15	13	96	24	2	4	—	4	5	2

Int. Classn. No.	Site		Cardigan-shire		Carmar-thenshire		Denbigh-shire		Flintshire		Glamor-ganshire	
			U.	R.	U.	R.	U.	R.	U.	R.	U.	R.
150	Œsophagus	{ M	3	9	9	13	12	17	12	9	85	25
		{ F	3	12	16	15	8	14	4	3	49	24
151	Stomach	{ M	28	45	67	109	60	84	65	69	548	173
		{ F	23	39	64	85	62	75	76	44	364	118
153	Large intestine except rectum	{ M	14	15	35	47	44	33	34	25	197	72
		{ F	11	29	53	52	44	38	46	31	230	86
154	Rectum	{ M	1	13	20	26	25	31	27	25	180	66
		{ F	4	7	15	17	18	14	19	15	92	39
157	Pancreas	{ M	2	2	14	13	20	16	13	8	83	25
		{ F	—	3	8	8	19	12	15	12	51	24
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M	—	—	2	1	—	1	1	1	5	6
		{ F	—	—	—	—	1	—	—	1	3	—
161	Larynx	{ M	—	2	2	7	8	7	5	—	40	8
		{ F	—	3	3	3	3	2	1	—	14	1
162, 163	Lung and bronchus ..	{ M	23	20	74	46	63	58	79	54	454	188
		{ F	3	5	8	7	12	5	12	9	59	13
180	Kidney	{ M	1	4	7	1	4	7	3	10	31	7
		{ F	1	—	—	4	5	3	5	—	10	3
181	Bladder and other urinary organs	{ M	2	3	9	8	15	6	14	12	84	31
		{ F	3	3	10	3	9	6	6	2	24	10
191	Skin (other)	{ M	—	1	7	6	5	2	6	4	22	12
		{ F	1	2	—	4	4	2	3	4	17	4
196	Bone (including jaw bone)	{ M	2	3	4	5	—	8	3	7	28	8
		{ F	—	4	4	6	5	3	1	4	14	5
200	Lymphosarcoma and reticulosarcoma ..	{ M	1	2	5	3	1	4	3	4	23	3
		{ F	1	1	2	3	1	2	2	1	9	1
201	Hodgkin's disease ..	{ M	—	1	—	9	4	3	4	5	34	20
		{ F	—	—	1	4	1	3	1	1	14	7
204	Leukæmia and aleukæmia	{ M	1	3	10	9	7	14	9	11	47	21
		{ F	2	5	4	8	6	6	4	8	36	16

Table LXXXIV.—*continued*—Urban and Rural Aggregates of Administrative Counties

Int. Classn. No.	Site		Merionethshire		Monmouthshire		Montgomeryshire		Pembrokeshire		Radnorshire	
			U.	R.	U.	R.	U.	R.	U.	R.	U.	R.
150	Esophagus	{ M	3	3	48	7	4	5	5	4	1	1
		{ F	3	10	19	6	3	8	5	11	2	3
151	Stomach	{ M	28	40	243	37	22	33	42	46	5	13
		{ F	32	28	187	24	13	27	26	30	4	6
153	Large intestine except rectum	{ M	5	14	106	13	12	15	20	24	3	11
		{ F	16	13	120	32	11	15	25	20	6	7
154	Rectum	{ M	6	7	66	14	5	11	14	26	3	3
		{ F	5	5	29	12	3	3	6	2	—	3
157	Pancreas	{ M	7	4	36	4	3	—	7	10	1	3
		{ F	—	4	30	4	1	4	5	6	—	2
160	Nose, nasal cavities, middle ear and accessory sinuses	{ M	—	—	3	1	—	1	1	—	—	—
		{ F	—	—	2	—	—	—	1	1	—	—
161	Larynx	{ M	—	1	18	2	—	1	1	—	—	—
		{ F	2	1	9	1	—	2	—	2	—	—
162, 163	Lung and bronchus ..	{ M	14	11	227	37	9	4	40	22	5	3
		{ F	3	3	37	13	3	3	9	5	1	1
180	Kidney	{ M	1	1	32	2	—	1	4	1	—	—
		{ F	1	2	10	3	—	—	1	1	—	1
181	Bladder and other urinary organs	{ M	—	4	38	6	3	3	3	8	1	—
		{ F	2	2	14	1	1	—	2	—	1	—
191	Skin (other)	{ M	1	4	16	2	—	3	3	7	—	2
		{ F	1	1	9	2	1	—	4	7	—	—
196	Bone (including jaw bone)	{ M	—	—	14	4	1	—	4	1	1	—
		{ F	—	3	11	—	1	1	—	1	—	1
200	Lymphosarcoma and reticulosarcoma ..	{ M	—	—	11	1	—	—	3	1	—	1
		{ F	—	—	8	—	—	—	—	2	—	—
201	Hodgkin's disease ..	{ M	1	—	16	3	—	4	1	2	1	—
		{ F	1	1	10	2	1	—	1	2	—	—
204	Leukæmia and aleukæmia	{ M	2	1	20	3	3	3	5	2	3	3
		{ F	—	1	10	1	1	4	2	3	—	—

DISEASES OF THE RESPIRATORY SYSTEM

Influenza (480-483)

In 1953 there was a mild outbreak of influenza during the first quarter of the year, the total number of deaths assigned to this head being 6,465 compared with 1,750 in 1952 when, with the exception of 1948, the recorded death rate was lower than in any year since 1921. The C.M.I. rose from 0·31 in 1952 to 1·14. The epidemic which appeared to be due mainly to the 'A' type of virus commenced in London and the South East early in January and lasted till the beginning of March with a peak in mid-February. The North of England was affected later and to a less degree, mortality rates generally decreasing with ascending latitude, the geographical pattern in 1953 being an almost complete reversal of that in 1951 (Tables LXXXVI and LXXXVII, pages 177 and 178). A notable feature in the distribution was that Merseyside which suffered so severely during the 1951 epidemic, had a lower death rate in 1953 than any comparable area in England and Wales. Wales, where high death rates from influenza were also recorded in 1951, also escaped lightly in 1953.

Table LXXXV (page 176) shows that the influenza deaths occurred mainly among persons aged 45 years and over, the mortality at younger ages differing little from that in years of minimal prevalence. At ages above 45 and under 80 the male mortality rates considerably exceeded the female rates, but at the oldest ages the female rates were the higher. The following table shows the mortality rates from influenza in 1953 (per million living) :—

Age	Males	Females
45-	52	39
50-	101	52
55-	187	88
60-	312	176
65-	497	316
70-	753	572
75-	1,246	1,172
80-	2,162	2,286
85 and over..	3,647	4,217

The increased mortality from influenza was again accompanied by an increase in the death rate from pneumonia and bronchitis among those aged 65 years and over, but the mortality rate from non-respiratory causes that so frequently rises in the elderly *pari passu* with the increase from influenza was the lowest since 1948.

Pneumonia (490-493, 763)

In 1953 there were 21,649 deaths from all forms of pneumonia compared with 19,521 in 1952, and the C.M.I. rose from 0·55 to 0·61, the increase affecting mainly those aged 55 years and over.

Table LXXXIX (page 179) shows the death rates by sex and age and the C.M.I's. for the two main forms of pneumonia since 1931. It will be seen that in both sexes below the age of 55 the death rate from lobar pneumonia still tended to fall, while above this age rates appear now to vary with the advent of upper respiratory infections and the severity of weather conditions. The infant death rate from bronchopneumonia and pneumonia not otherwise specified was the lowest yet recorded.

There were 37,214 notifications of pneumonia in 1953 (Table LXXXVIII, page 178) giving a ratio of 58 deaths per 100 notifications ; this indicates in these days of successful antibiotic therapy how incomplete is this notification.

The relation of urbanisation to the death rate from pneumonia is shown in Table XC (page 181). Above the age of 45 the death rates were highest in the conurbations and lowest in rural districts falling in a steady gradient as population size decreases. Between 15 and 44 years when deaths from pneumonia are relatively less frequent the death rate was considerably lower in the conurbations than in the rural districts. Greater London had the lowest death rate in the conurbations for these age-groups and the highest for elderly persons.

Bronchitis (500-502)

Table XCI (page 183) shows the death rates from bronchitis since 1931. Since the peak year in 1940 the deaths attributed to acute bronchitis and bronchitis unspecified form a lessening proportion of the whole group. In Table XCIII (page 186) the death rates by sex and age are given for each year together with the C.M.I's. The death rate from acute bronchitis in infants and children under 5 is now but a fraction of that recorded 10 years ago; the C.M.I. for males of all ages has fallen to 0.65 from its peak of 2.16 in 1940 while that for females has fallen to 0.58 from 2.03. The C.M.I. for chronic bronchitis has risen to 1.51 for males but changed little for females.

The proportion of respiratory mortality in elderly persons attributed to bronchitis continues to decrease and that attributed to pneumonia to increase as the following figures show:—

Year	Total deaths from diseases of the respiratory system at ages 65 and over*	Per cent assigned to	
		Pneumonia	Bronchitis
1940-44	165,240	26.7	65.2
1945-49	158,642	29.0	61.8
1950	33,005	31.0	62.1
1951	44,082	32.7	61.2
1952	33,998	35.4	57.9
1953	38,791	36.4	57.3

* Excluding influenza, tuberculosis and cancer.

Table XCII (page 184) shows the effect of urbanisation on the death rate from bronchitis. The highest death rates among elderly persons are found in the South East Lancashire conurbation and in Greater London.

The term 'Rural Districts' used in the tables mentioned above denotes the areas so defined under the various Local Government Acts and is an administrative definition rather than an accurate description. An appreciable amount of industry and dense housing is not infrequent in these Rural Districts. To provide evidence of mortality under "Truly Rural" conditions, areas have been selected in each of the four regional groups that fulfil the following criteria :—

- (a) Not more than one per cent of the total rateable value of the district should be assessed as industrial property.
- (b) The rural district should not be contiguous with any urban district with a population of 25,000 or over or with a group of urban districts where the population is 25,000 or over.
- (c) The density of population within the district does not exceed one person per four acres.

A list of these areas is shown in Appendix B.

Since the populations of these selected rural districts are small, deaths have been computed over the four year period 1950-53 and standardised mortality ratios worked out in each of the four regional groups. They are shown below with the corresponding ratios for aggregate summaries by type of area in England and Wales for deaths from all causes, pneumonia, bronchitis, and other respiratory diseases, (cancer of the lung and respiratory tuberculosis being excluded from the last head).

	All Causes		Pneumonia		Bronchitis		Other respiratory diseases	
	Males	Females	Males	Females	Males	Females	Males	Females
Selected Rural Districts	85	93	66	75	51	64	78	112
North of England	88	98	60	56	42	61	67	80
Midlands and Eastern	81	89	65	86	53	66	71	86
South of England	80	88	72	72	51	55	76	124
Wales	93	101	63	73	55	80	92	131
England and Wales; aggregates summary by type of area:								
Conurbations	106	102	114	113	133	129	95	104
Areas outside conurbations: ..	97	99	86	88	82	83	103	98
Urban areas with populations of 100,000 and over	106	103	109	107	108	103	113	100
Urban areas with populations of 50,000 and under 100,000	101	98	94	90	91	85	94	100
Urban areas with populations under 50,000	99	100	82	83	85	83	106	98
Rural Districts	88	94	74	79	60	69	97	95

The mortality ratios for pneumonia and bronchitis for men are considerably lower in these selected rural districts than in those administratively defined as rural, those for women less so. The urbanisation gradient of male deaths from bronchitis is particularly steep, the death rate in the conurbations being nearly three times as great as in the selected rural districts.

Within the group of respiratory infections urban life appears to impose a greater penalty on men than on women.

Table LXXXV.—Diseases of the respiratory system: Death rates per million living at ages 0-14, 15-44 and 45 and over from influenza ; at ages 65 and over from bronchitis, pneumonia and other respiratory diseases (excluding influenza) and from non-respiratory diseases, 1921 to 1953

(Excluding non-civilians, 1939 to 1949)

Year	Influenza			Bronchitis	Pneumonia	Other respiratory diseases (excluding influenza)	All non-respiratory causes
	0-14	15-44	45 and over	65 and over			
1921 ..	121	129	564	8,773	2,704	950	58,611
1922 ..	305	289	1,338	10,781	3,088	1,018	61,410
1923 ..	83	107	565	8,541	2,765	948	58,380
1924 ..	229	205	1,257	9,760	2,947	949	60,003
1925 ..	117	141	858	9,002	3,023	969	61,051
1926 ..	91	104	573	7,461	2,563	857	59,692
1927 ..	252	222	1,440	8,275	2,953	904	61,934
1928 ..	71	93	480	5,531	2,409	760	61,823
1929 ..	261	250	1,948	7,959	3,513	898	66,771
1930 ..	42	52	318	4,417	2,272	648	61,145
1931 ..	141	139	898	5,674	2,680	763	64,743
1932 ..	113	114	840	4,506	2,525	686	64,885
1933 ..	160	238	1,408	4,541	2,465	688	64,022
1934 ..	46	55	340	3,512	2,380	599	63,065
1935 ..	57	71	445	3,152	2,238	614	63,800
1936 ..	47	53	367	3,410	2,367	596	65,865
1937 ..	113	144	1,165	3,355	2,436	591	65,086
1938 ..	42	45	279	2,395	2,062	484	62,691
1939 ..	57	62	555	2,744	2,098	497	65,830
1940 ..	88	76	691	7,817	2,678	927	66,594
1941 ..	59	43	413	5,720	2,352	671	60,868
1942 ..	36	23	193	4,365	1,889	577	56,728
1943 ..	77	57	780	5,075	2,328	638	56,343
1944 ..	39	19	226	4,164	1,806	561	56,231
1945 ..	33	15	148	4,457	1,790	604	56,478
1946 ..	44	27	305	4,246	1,939	604	57,489
1947 ..	31	15	188	4,743	2,214	661	60,211
1948 ..	16	7	64	3,643	1,762	616	54,855
1949 ..	27	20	334	4,544	2,406	739	60,155
1949* ..	21	20	334	4,446	2,406	471	60,521
1950* ..	17	18	222	4,279	2,139	475	61,670
1951* ..	28	32	968	5,578	2,980	551	64,034
1952* ..	7	7	99	3,998	2,445	465	59,675
1953* ..	14	17	379	4,470	2,836	491	58,927

* According to the 6th Revision of the International Classification. Other years according to the classification in use at the time.

Table LXXXVI.—Influenza : Death rates per million living in Standard Regions and aggregate summaries (by type of area), 1953

	Death rate per million living		Death rate per million living
ENGLAND AND WALES ..	147	MIDLANDS AND EASTERN Regions :—<i>continued</i>	
Conurbations:	139	Conurbation:	
Areas outside conurbations:		West Midlands	161
Urban areas with popula- tions of 100,000 and over	128	Areas outside conurbation:	
Urban areas with popula- tions of 50,000 and under		Urban areas with popula- tions of 100,000 and over	120
100,000	142	Urban areas with popula- tions of 50,000 and under	
Urban areas with popula- tions under 50,000 ..	164	100,000	110
Rural Districts	157	Urban areas with popula- tions under 50,000 ..	166
NORTH OF ENGLAND		Rural Districts	149
Regions:		GREATER LONDON ..	160
Northern	86	SOUTH OF ENGLAND	
East and West Ridings ..	111	Regions:	
North Western	95	Remainder of South	
Total	98	Eastern	281
Conurbations:		Southern	195
Tyneside	106	South Western	208
West Yorkshire	113	Total	226
South East Lancashire ..	128	Urban areas with popula- tions of 100,000 and over	198
Merseyside	44	Urban areas with popula- tions of 50,000 and under	
Total	102	100,000	236
Areas outside conurbations:		Urban areas with popula- tions under 50,000 ..	244
Urban areas with popula- tions of 100,000 and over	91	Rural Districts	220
Urban areas with popula- tions of 50,000 and under		WALES (including	
100,000	83	Monmouthshire)	101
Urban area with popula- tion under 50,000 ..	98	Urban areas with popula- tions of 100,000 and over	89
Rural Districts	97	Urban areas with popula- tions of 50,000 and under	
MIDLANDS AND EASTERN		100,000	84
Regions:		Urban area with popula- tion under 50,000 ..	118
North Midland	136	Rural Districts	89
Midland	146		
Eastern	158		
Total	147		

Table LXXXVII.—Influenza : Death rates per million living in Standard Regions, 1946 to 1953

	Death rates per million living							
	1946	1947	1948	1949	1950	1951	1952	1953
England and Wales	130	79	29	131	89	361	40	147
Northern	117	90	31	105	147	356	30	86
East and West Ridings ..	119	61	27	153	60	293	41	111
North Western	147	69	31	167	104	584	54	95
North Midland	147	79	22	135	79	328	35	136
Midland	131	76	30	166	98	408	40	146
Eastern	125	76	25	135	69	340	23	158
London and South Eastern	118	83	27	104	72	234	43	189
Southern	105	68	25	94	70	270	17	195
South Western	147	86	35	124	107	390	49	208
Wales	144	114	42	132	119	506	43	101

Table LXXXVIII.—Pneumonia : Notifications, deaths and deaths per 100 notifications, 1941 to 1953

	Notifications *	Deaths†	Deaths per 100 notifications
1941	50,942	26,418	52
1942	42,698	20,828	49
1943	52,407	24,763	47
1944	38,631	20,040	52
1945	34,371	19,984	58
1946	36,613	20,215	55
1947	33,229	22,695	68
1948	31,358	17,629	56
1949	34,561	20,792	60
1949†	34,561	21,001	61
1950†	30,663	18,416	60
1951†	43,259	23,442	54
1952†	31,736	19,521	62
1953†	37,214	21,649	58

* Corrected for diagnosis revision from 1944, except for cases notified in Port Health Districts.

† According to the 6th Revision of the International Classification. Other years according to the classification in use at the time.

Table LXXXIX.—Pneumonia : Death rates per million living by sex and age and Comparative Mortality Indices, 1931 to 1953

Year	0–	1–	5–	15–	25–	35–	45–	55–	65–	75 and over	C.M.I. (all ages)
Lobar pneumonia—Males											
1931	880	275	62	124	170	356	525	705	948	1,229	1·11
1932	890	244	68	124	171	320	482	641	919	1,253	1·06
1933	904	272	65	116	167	341	498	652	799	1,146	1·04
1934	911	280	62	130	179	364	587	721	945	1,264	1·16
1935	912	215	55	103	160	332	533	737	827	1,126	1·06
1936	873	227	53	102	157	310	527	727	868	1,012	1·04
1937	938	245	54	91	159	316	540	759	803	1,075	1·05
1938	832	199	49	108	149	300	515	693	824	1,102	1·00
1939	657	131	26	44	67	142	327	526	701	1,122	0·69
1940	795	131	27	53	75	137	311	560	732	958	0·71
1941	1,014	154	27	41	50	137	295	544	717	1,014	0·70
1942	712	98	19	34	41	118	223	477	647	804	0·59
1943	784	77	19	26	37	106	246	478	655	1,057	0·62
1944	773	62	14	20	34	86	186	403	610	859	0·53
1945	746	51	11	21	28	65	158	347	540	824	0·46
1946	631	55	5	15	25	56	136	354	547	868	0·42
1947	546	60	6	15	23	55	139	349	528	938	0·42
1948	505	35	7	9	20	34	130	283	461	758	0·34
1949	491	30	7	8	16	33	96	273	480	877	0·33
1949*	413	30	7	8	16	33	96	273	480	877	0·33
1950*	286	25	5	12	16	33	97	239	459	787	0·30
1951*	270	16	5	11	12	32	97	248	509	985	0·32
1952*	245	26	2	5	12	23	82	221	478	911	0·29
1953*	216	11	4	4	11	25	80	227	464	946	0·29
Lobar pneumonia—Females											
1931	717	242	66	76	101	173	206	338	567	965	1·31
1932	671	217	54	68	94	146	194	331	577	1,006	1·25
1933	539	239	52	61	87	160	186	320	514	921	1·18
1934	588	205	56	56	91	145	180	314	584	890	1·18
1935	542	193	48	58	84	141	174	289	534	783	1·10
1936	641	194	45	57	87	122	182	308	510	841	1·11
1937	631	200	41	46	77	133	181	288	513	875	1·09
1938	658	200	38	49	74	125	162	258	456	717	1·00
1939	538	103	27	39	50	70	116	215	372	698	0·75
1940	750	120	23	27	48	69	114	208	413	741	0·79
1941	754	113	18	31	41	68	103	214	412	710	0·76
1942	597	96	17	28	38	56	90	166	305	570	0·62
1943	682	94	18	39	46	59	106	173	375	660	0·72
1944	470	53	15	22	26	46	78	133	281	556	0·53
1945	600	59	9	18	26	37	68	123	275	544	0·51
1946	557	48	10	16	25	37	62	130	274	568	0·50
1947	525	40	9	15	21	27	63	131	267	622	0·50
1948	402	29	5	10	14	23	45	90	217	507	0·38
1949	343	24	5	9	16	26	44	104	269	607	0·43
1949*	303	24	5	9	16	26	44	104	269	607	0·42
1950*	214	19	8	8	13	21	39	90	235	574	0·37
1951*	254	17	4	5	17	22	41	98	247	604	0·39
1952*	159	14	4	4	9	17	34	80	206	550	0·33
1953*	151	15	4	6	9	17	32	86	203	596	0·34

Table LXXXIX.—*continued.*

Year	0-	1-	5-	15-	25-	35-	45-	55-	65--	75 and over	C.M.I. (all ages)
Broncho and unspecified pneumonia—Males											
1931	12,794	2,119	113	73	100	229	433	696	1,640	3,777	1.43
1932	10,635	1,530	97	61	87	192	357	569	1,447	3,631	1.18
1933	10,183	1,638	110	58	97	237	431	671	1,394	3,724	1.23
1934	8,972	1,431	92	57	76	205	390	672	1,391	3,224	1.11
1935	9,050	1,089	65	54	81	172	352	600	1,397	3,211	1.04
1936	9,726	1,218	65	55	72	155	390	705	1,435	3,319	1.14
1937	10,378	1,233	61	43	62	161	410	776	1,494	3,622	1.21
1938	8,643	1,059	70	58	78	173	371	665	1,306	3,202	1.00
1939	7,650	631	46	36	48	113	291	595	1,102	2,935	0.89
1940	10,879	1,103	55	55	80	165	419	895	1,573	4,032	1.18
1941	11,361	908	53	45	59	126	312	728	1,252	3,277	1.02
1942	8,238	522	41	39	52	109	229	547	1,095	2,824	0.80
1943	9,051	551	42	37	40	108	285	619	1,310	3,456	0.94
1944	7,507	410	41	23	41	89	229	506	1,056	2,625	0.76
1945	7,904	386	36	26	37	66	200	524	1,013	2,664	0.75
1946	7,386	304	30	24	35	69	202	508	1,070	2,875	0.71
1947	7,293	325	28	28	32	70	208	535	1,224	3,643	0.80
1948	5,639	229	22	16	21	47	152	432	985	2,922	0.59
1949	5,299	234	16	27	26	57	167	527	1,345	3,948	0.68
1949*	5,723	234	16	27	26	57	167	527	1,345	3,948	0.68
1950*	4,849	182	29	17	29	46	142	395	1,096	3,680	0.58
1951*	5,467	159	18	17	28	59	172	625	1,665	5,325	0.77
1952*	4,922	152	16	17	19	48	147	439	1,302	4,581	0.64
1953*	4,804	154	22	19	15	42	136	474	1,547	5,405	0.72
Broncho and unspecified pneumonia—Females											
1931	9,413	1,815	111	48	86	154	244	494	1,374	3,452	1.53
1932	7,874	1,460	95	51	75	127	202	470	1,208	3,216	1.32
1933	7,556	1,467	98	42	75	153	248	480	1,217	3,358	1.35
1934	7,047	1,272	79	47	63	108	211	415	1,133	2,837	1.18
1935	7,151	997	66	38	63	105	184	401	1,037	2,661	1.10
1936	7,335	1,004	65	32	58	92	191	368	1,079	2,925	1.14
1937	7,154	1,109	57	32	59	123	225	445	1,098	3,116	1.21
1938	6,543	865	64	47	52	97	170	355	890	2,575	1.00
1939	5,869	581	46	35	55	87	148	368	962	3,012	0.97
1940	8,067	918	52	38	61	97	203	448	1,199	3,581	1.23
1941	9,060	817	56	39	54	81	153	341	982	3,251	1.12
1942	6,160	501	36	33	45	74	122	270	744	2,330	0.82
1943	6,890	529	40	36	57	90	144	339	899	3,166	1.01
1944	6,042	395	32	25	40	57	96	224	686	2,184	0.77
1945	6,493	351	28	24	36	56	92	233	712	2,216	0.77
1946	6,097	281	24	21	36	53	108	261	723	2,636	0.79
1947	5,642	286	25	21	24	50	108	268	789	3,176	0.86
1948	4,569	240	15	18	22	39	88	183	598	2,385	0.64
1949	4,242	214	20	16	33	50	92	282	912	3,504	0.81
1949*	4,503	214	20	16	33	50	92	282	912	3,504	0.80
1950*	4,018	188	19	16	25	50	92	226	711	3,219	0.70
1951*	4,303	171	17	13	23	38	99	293	1,032	4,732	0.92
1952*	3,834	134	16	14	20	36	84	227	775	3,691	0.74
1953*	3,623	157	20	16	16	36	80	241	944	4,327	0.83

* According to the 6th Revision of the International Classification. Other years according to the 5th Revision.

Table XC.—Pneumonia : Death rates per million living by sex at ages 15-44, 45-64 and 65 and over in Standard Regions and aggregate summaries (by type of area), 1953

	15—		45—		65 and over	
	M.	F.	M.	F.	M.	F.
ENGLAND AND WALES	39	34	413	209	3,373	2,473
Conurbations:	38	24	464	213	4,188	3,011
Areas outside conurbations:						
Urban areas with populations of 100,000 and over	51	37	442	240	3,673	2,591
Urban areas with populations of 50,000 and under 100,000 ..	28	41	439	201	3,297	3,152
Urban areas with populations under 50,000	33	35	346	194	2,861	2,067
Rural Districts	45	47	342	198	2,523	2,069
NORTH OF ENGLAND						
Regions:						
Northern	33	37	402	175	2,716	1,918
East and West Ridings	62	34	426	247	3,456	2,337
North Western	43	33	419	200	2,903	1,916
Total	46	34	417	208	3,027	2,043
Conurbations:						
Tyneside	36	49	464	159	3,250	2,042
West Yorkshire	66	17	420	243	4,092	2,958
South East Lancashire	41	29	412	226	3,238	1,963
Merseyside	55	23	479	217	3,865	3,280
Total	50	27	434	221	3,608	2,527
Areas outside conurbations:						
Urban areas with populations of 100,000 and over	65	41	517	238	3,360	1,851
Urban areas with populations of 50,000 and under 100,000 ..	28	35	477	212	2,778	1,910
Urban areas with populations under 50,000	27	40	325	179	2,349	1,491
Rural Districts	56	42	364	175	2,043	1,385
MIDLANDS AND EASTERN						
Regions:						
North Midland	43	32	389	193	2,981	2,217
Midland	43	45	396	242	3,128	2,379
Eastern	35	38	409	230	3,509	2,874
Total	41	39	397	223	3,204	2,494

Table XC.—*continued.*

	15–		45–		65 and over	
	M.	F.	M.	F.	M.	F.
MIDLANDS AND EASTERN—<i>contd.</i>						
Conurbation:						
West Midlands	44	32	484	230	3,619	2,512
Areas outside conurbation:						
Urban areas with populations of 100,000 and over	57	40	432	238	3,590	3,085
Urban areas with populations of 50,000 and under 100,000 ..	17	34	424	212	3,855	2,221
Urban areas with populations under 50,000	38	39	365	231	3,268	2,369
Rural Districts	39	47	334	204	2,536	2,316
GREATER LONDON	28	20	482	204	4,778	3,481
SOUTH OF ENGLAND						
Regions:						
Remainder of South Eastern ..	53	49	336	214	3,690	2,511
Southern	33	45	373	194	3,421	2,950
South Western	51	36	422	227	3,045	2,228
Total	45	43	380	213	3,374	2,542
Urban areas with populations of 100,000 and over	39	42	444	260	4,790	3,342
Urban areas with populations of 50,000 and under 100,000 ..	43	55	398	166	3,345	2,279
Urban areas with populations under 50,000	41	33	368	204	3,232	2,526
Rural Districts	53	49	348	219	2,893	2,281
WALES (including Monmouthshire) ..	17	24	301	159	2,039	1,263
Urban areas with populations of 100,000 and over	24	7	249	198	2,000	950
Urban area with population of 50,000 and under 100,000 ..	—	—	735	465	2,174	1,714
Urban areas with populations under 50,000	18	22	304	122	2,079	1,184
Rural Districts	12	45	302	154	2,019	1,613

Table XCI.—Bronchitis : Death rates per million living, 1931 to 1953

	Acute Bronchitis	Chronic Bronchitis	Bronchitis unqualified	Bronchitis All forms
1931	?	?	?	929
1932	?	?	?	818
1933	?	?	?	865
1934	?	?	?	738
1935	?	?	?	718
1936	179	408	251	838
1937	197	420	246	863
1938	132	327	171	630
1939	161	399	199	758
1940	282	582	241	1106
1941	203	442	171	816
1942	156	361	124	641
1943	197	405	141	744
1944	140	383	117	640
1945	157	417	122	696
1946	143	408	109	660
1947	161	455	115	731
1948	100	392	81	573
1949	131	467	97	695
1949*	129	455	78	662
1950*	102	482	61	645
1951*	146	621	77	844
1952*	90	480	50	620
1953*	105	530	54	689

* According to the 6th Revision of the International Classification. Other years according to the classification in use at the time.

Table XCII.—Bronchitis: Death rates per million living by sex at ages 15-44, 45-64 and 65 and over in Standard Regions and aggregate summaries (by type of area), 1953

	15—		45—		65 and over	
	M.	F.	M.	F.	M.	F.
ENGLAND AND WALES	31	18	1,118	248	6,593	3,037
Conurbations:	35	23	1,439	318	8,771	3,990
Areas outside conurbations:						
Urban areas with populations of 100,000 and over	48	18	1,139	242	6,969	3,164
Urban areas with populations of 50,000 and under 100,000	27	21	972	237	5,974	2,578
Urban areas with populations under 50,000	30	14	995	199	5,725	2,459
Rural Districts	16	13	611	166	4,162	2,113
NORTH OF ENGLAND						
Regions:						
Northern	21	17	1,066	247	4,865	2,516
East and West Ridings	49	21	1,283	327	7,396	3,337
North Western	52	25	1,481	358	7,590	3,496
Total	43	22	1,328	325	6,892	3,244
Conurbations:						
Tyneside	24	22	1,268	280	6,000	2,667
West Yorkshire	35	28	1,420	352	8,579	3,617
South East Lancashire	45	29	1,879	472	9,842	4,681
Merseyside	48	19	1,425	234	6,250	2,610
Total	40	26	1,581	367	8,253	3,720
Areas outside conurbations:						
Urban areas with populations of 100,000 and over	80	19	1,379	316	6,747	3,214
Urban areas with populations of 50,000 and under 100,000	56	18	1,124	370	6,845	3,488
Urban areas with populations under 50,000	44	21	1,187	261	5,912	2,681
Rural Districts	17	14	718	246	4,169	2,235
MIDLANDS AND EASTERN						
Regions:						
North Midland	20	18	850	228	6,437	2,557
Midland	32	25	1,220	264	7,061	3,225
Eastern	21	11	684	135	4,801	2,268
Total	25	19	948	215	6,134	2,704
Conurbation:						
West Midlands	38	30	1,508	284	8,512	3,488
Areas outside conurbation:						
Urban areas with populations of 100,000 and over	32	16	1,111	238	7,434	3,163
Urban areas with populations of 50,000 and under 100,000	9	30	769	249	6,123	2,335
Urban areas with populations under 50,000	31	11	880	196	6,441	2,721
Rural Districts	13	15	570	149	3,938	2,036

Table XCII.—*continued.*

	15—		45—		65 and over	
	M.	F.	M.	F.	M.	F.
GREATER LONDON	30	19	1,314	289	9,237	4,302
SOUTH OF ENGLAND						
Regions:						
Remainder of South Eastern ..	27	15	723	137	5,092	2,266
Southern	10	11	769	119	5,015	2,413
South Western	24	10	672	141	4,381	2,186
Total	20	12	719	133	4,812	2,282
Urban areas with populations of 100,000 and over	35	16	871	162	5,994	3,205
Urban areas with populations of 50,000 and under 100,000 ..	14	17	934	109	4,746	2,073
Urban areas with populations under 50,000	17	9	736	138	4,914	2,193
Rural Districts	17	11	534	122	4,215	2,018
WALES (including Monmouthshire) ..	28	15	1,184	222	6,205	2,544
Urban areas with populations of 100,000 and over	40	22	1,188	247	8,741	2,982
Urban area with population of 50,000 and under 100,000 ..	83	—	2,500	116	13,913	4,000
Urban areas with populations under 50,000	27	17	1,398	217	5,824	2,187
Rural Districts	18	6	785	215	4,688	2,645

Table XCIII.—Bronchitis: Death rates per million living by sex and age and Comparative Mortality Indices, 1931 to 1953
(Excluding non-civilians, 1939 to 1949)

Year	Males												Females											
												C.M.I. (all ages)												C.M.I. (all ages)
	0-	1-	5-	15-	25-	35-	45-	55-	65-	75 and over	75 and over	0-	1-	5-	15-	25-	35-	45-	55-	65-	75 and over	C.M.I. (all ages)		
Acute Bronchitis																								
1931	..	147	8	7	7	24	76	159	611	2,798	—	1,757	137	7	5	5	7	18	43	140	740	3,515	—	
1932	..	103	5	2	4	20	41	117	463	2,102	—	1,399	115	5	3	3	7	13	37	102	495	2,643	—	
1933	..	98	4	5	5	25	75	153	481	2,513	—	1,182	104	8	4	4	7	18	46	129	526	3,088	—	
1934	..	95	6	2	3	16	52	109	380	1,780	—	1,081	97	5	3	3	5	12	22	82	434	2,062	—	
1935	..	1,287	70	2	3	14	41	91	356	1,567	—	1,069	67	4	3	3	4	8	27	79	362	1,851	—	
1936	..	1,332	82	4	3	16	57	138	431	1,833	1.36	1,021	74	8	3	3	5	11	23	95	411	1,935	1.40	
1937	..	1,473	85	6	4	12	59	143	413	1,861	1.39	1,133	63	3	2	2	5	15	32	97	424	2,321	1.57	
1938	..	1,172	72	2	3	10	34	102	268	1,347	1.00	828	46	4	3	3	5	7	18	49	262	1,484	1.00	
1939	..	951	65	5	4	13	45	103	326	1,684	1.10	914	63	4	1	1	4	8	22	69	323	1,694	1.18	
1940	..	1,892	131	11	9	56	216	539	1,159	3,912	2.16	1,373	98	8	6	6	11	28	101	304	1,103	4,329	2.03	
1941	..	2,114	115	9	4	27	107	322	721	2,757	1.47	1,683	105	6	5	5	10	19	59	172	744	3,273	1.50	
1942	..	1,202	78	8	5	26	102	294	668	2,284	1.24	941	56	5	6	4	8	11	35	130	521	2,223	1.01	
1943	..	1,293	70	7	3	23	99	310	764	2,877	1.40	1,079	62	5	4	3	6	22	47	172	663	3,071	1.34	
1944	..	1,091	44	6	4	19	88	259	593	1,933	1.08	896	51	4	3	4	11	33	101	423	1,852	0.86		
1945	..	1,099	55	4	4	19	84	273	652	2,023	1.12	901	47	3	4	4	16	34	128	482	2,172	0.97		
1946	..	1,008	45	4	4	20	76	232	535	1,920	0.98	657	38	4	5	5	12	25	104	425	2,105	0.88		
1947	..	738	49	4	4	15	87	272	574	2,458	1.10	546	30	4	3	3	13	34	135	440	2,322	0.95		
1948	..	689	36	5	3	9	46	169	423	1,311	0.69	493	29	3	2	2	1	8	20	60	259	1,329	0.55	
1949	..	477	22	2	4	11	53	197	523	1,860	0.82	410	19	4	5	5	4	10	26	87	386	1,951	0.77	
1949*	..	467	19	2	4	5	52	197	512	1,834	0.81	399	19	4	4	4	4	10	25	88	384	1,943	0.77	
1950*	..	541	25	4	1	6	30	97	346	1,505	0.60	367	23	2	3	3	5	11	17	61	269	1,635	0.62	
1951*	..	542	28	4	2	8	46	165	518	2,250	0.87	428	31	3	3	3	7	19	87	422	2,290	0.87		
1952*	..	454	34	4	1	7	30	101	337	1,410	0.57	338	24	3	4	4	5	11	50	218	1,262	0.49		
1953*	..	500	30	3	1	10	29	134	399	1,552	0.65	410	29	2	2	2	3	13	61	255	1,497	0.58		

Table XCIII.—continued.

Year	Males											Females											
	0-	1-	5-	15-	25-	35-	45-	55-	65-	75 and over	C.M.I. (all ages)	0-	1-	5-	15-	25-	35-	45-	55-	65-	75 and over	C.M.I. (all ages)	
Chronic Bronchitis																							
1931	26	12	5	12	26	91	248	527	1,490	4,820	—	27	3	6	11	11	20	70	242	952	3,219	—	
1932	33	16	6	16	19	82	210	431	1,244	3,934	—	27	9	4	8	14	22	60	195	720	2,664	—	
1933	14	11	6	14	27	78	249	478	1,235	3,873	—	14	9	4	11	13	27	75	208	688	2,579	—	
1934	18	12	6	16	20	56	220	470	1,120	3,274	—	15	9	4	9	15	23	47	164	635	2,094	—	
1935	14	8	8	19	26	79	217	408	1,048	3,333	—	7	11	5	13	12	28	44	152	528	1,926	—	
1936	27	8	4	18	18	60	250	522	1,161	3,590	1.23	18	8	5	11	14	23	58	176	621	2,072	1.40	
1937	34	10	6	19	21	69	255	543	1,136	3,279	1.21	18	6	5	10	14	23	61	189	578	1,958	1.35	
1938	23	13	7	16	31	45	196	433	1,067	2,809	1.00	10	8	6	11	13	18	45	121	412	1,505	1.00	
1939	26	6	5	21	22	61	236	552	1,067	3,075	1.16	14	6	6	13	12	25	53	161	474	1,803	1.21	
1940	61	16	9	27	48	156	737	1,970	3,642	9,616	1.72	42	20	10	21	26	55	163	629	1,927	6,490	1.82	
1941	39	27	8	20	38	119	520	1,446	2,762	7,638	1.31	22	17	5	17	15	42	123	394	1,368	4,985	1.32	
1942	56	18	8	20	36	105	449	1,255	2,314	5,998	1.10	21	12	6	18	18	35	95	281	1,026	3,555	0.98	
1943	36	18	7	20	40	108	492	1,351	2,495	6,521	1.20	22	13	4	14	22	46	113	337	1,145	3,983	1.11	
1944	28	15	6	19	37	100	441	1,411	2,495	5,778	1.16	15	7	6	13	23	39	110	299	1,009	3,360	0.96	
1945	31	8	8	16	33	101	488	1,527	2,798	5,747	1.22	21	12	5	12	19	39	123	367	1,116	3,413	1.03	
1946	25	9	7	15	32	98	461	1,526	2,729	5,713	1.18	12	10	7	13	18	41	103	336	1,034	3,295	0.97	
1947	22	15	5	11	28	93	495	1,690	3,157	6,786	1.33	14	11	9	10	19	47	123	329	1,120	3,465	1.03	
1948	20	7	8	11	24	75	414	1,462	2,991	5,410	1.15	16	14	5	13	17	37	94	278	880	2,822	0.83	
1949	13	7	3	12	21	82	470	1,686	3,419	6,245	1.31	11	7	5	12	15	39	112	363	1,192	3,516	1.06	
1949*	11	1	2	3	8	61	413	1,618	3,362	6,563	1.31	3	2	1	2	6	22	92	324	1,146	3,705	1.06	
1950*	39	26	2	3	8	62	426	1,727	3,634	6,938	1.36	18	1	0	3	5	22	79	325	1,141	3,787	1.02	
1951*	43	4	2	3	10	79	541	2,185	4,715	8,993	1.74	24	3	1	2	8	28	108	464	1,439	4,724	1.32	
1952*	30	5	1	1	10	58	424	1,757	3,807	7,029	1.39	22	3	1	3	7	22	73	284	1,023	3,343	0.92	
1953*	32	2	2	3	9	59	438	1,820	4,339	7,645	1.51	19	6	1	4	7	26	78	337	1,107	3,713	1.02	

Table XCIII.—continued.

Year	Males												Females																				
												C.M.I. (all ages)												75 and over	C.M.I. (all ages)								
	0-	1-	5-	15-	25-	35-	45-	55-	65-	75 and over	0-	1-	5-	15-	25-	35-	45-	55-	65-	75 and over	0-	1-	5-	15-	25-	35-	45-	55-	65-	75 and over	C.M.I. (all ages)		
Bronchitis Unqualified																																	
1931 ..	2,026	125	5	4	10	34	127	277	1,233	6,120	—	1,497	95	5	5	6	14	49	197	1,021	6,371	—											
1932 ..	1,639	88	4	2	11	25	81	203	827	4,985	—	1,460	84	6	3	4	11	33	129	687	4,825	—											
1933 ..	1,362	73	5	4	7	28	110	225	827	4,611	—	1,107	71	4	4	6	16	35	136	701	4,753	—											
1934 ..	1,110	60	3	4	4	18	76	188	642	3,534	—	777	67	1	6	6	10	30	91	520	3,252	—											
1935 ..	1,038	44	3	3	3	17	68	165	557	3,220	—	823	57	3	2	3	10	24	85	421	2,760	—											
1936 ..	1,096	38	3	2	7	21	91	198	562	3,345	—	690	42	4	2	2	12	24	89	431	2,980	—											
1937 ..	929	44	3	2	5	18	82	169	554	3,158	—	684	40	3	3	3	8	27	94	439	2,860	—											
1938 ..	710	31	4	2	0	11	54	146	399	2,181	—	522	36	3	3	3	4	16	50	253	1,894	—											
1939 ..	628	34	2	2	5	14	63	167	412	2,172	—	491	41	2	1	3	6	15	61	294	2,109	—											
1940 ..	1,215	92	5	6	12	47	208	592	1,210	3,518	—	845	77	3	5	10	26	65	258	939	3,234	—											
1941 ..	1,536	68	5	5	5	29	121	397	856	2,314	—	1,108	50	2	6	5	10	47	141	571	2,347	—											
1942 ..	828	29	3	2	6	20	88	296	655	1,941	—	566	27	2	1	4	11	39	107	389	1,538	—											
1943 ..	835	36	4	2	4	19	108	302	681	1,987	—	513	38	2	2	3	12	33	107	501	1,908	—											
1944 ..	680	30	2	2	4	15	85	265	598	1,649	—	464	23	1	3	5	9	29	87	360	1,436	—											
1945 ..	630	18	3	3	3	16	84	281	601	1,834	—	437	18	2	2	5	8	22	107	358	1,435	—											
1946 ..	458	16	1	1	3	14	68	246	501	1,631	—	331	14	1	2	6	7	24	83	307	1,428	—											
1947 ..	327	18	1	2	5	11	63	246	531	1,857	—	296	21	2	1	3	6	21	80	329	1,492	—											
1948 ..	226	16	1	3	2	7	46	185	420	1,252	—	217	8	1	2	2	5	13	55	209	988	—											
1949 ..	288	8	1	2	2	8	40	206	505	1,505	—	191	7	1	1	1	5	18	69	270	1,254	—											
1949* ..	269	9	1	2	2	5	26	147	396	1,137	—	171	7	1	1	2	4	14	61	249	1,025	—											
1950* ..	216	13	2	0	1	4	18	98	316	933	—	182	10	2	0	1	2	11	45	172	775	—											
1951* ..	159	14	0	0	1	5	28	129	386	1,149	—	153	7	0	1	2	6	15	56	241	1,006	—											
1952* ..	179	10	3	—	1	2	22	81	248	724	—	119	10	2	2	1	2	10	35	135	636	—											
1953* ..	187	9	1	1	—	4	20	82	269	865	—	139	10	2	—	2	4	8	35	139	665	—											

* According to the 6th Revision of the International Classification. Other years according to the classification in use at the time.

DISEASES OF THE DIGESTIVE SYSTEM

The International Statistical Classification groups diseases together according to anatomical site when the ætiology is insufficiently well established to justify inclusion elsewhere. A number of conditions affecting the digestive system therefore appear in other parts of the classification. Those primarily due to a specific micro-organism (such as tuberculosis of intestines, salmonella infections and bacillary dysentery, and infectious hepatitis) are shown in the 'Infective and Parasitic' section, while tumours of all kinds and congenital malformations are classified along with tumours and malformations of other systems in Sections II and XIV with subsidiary distinction by anatomical site within each section. Certain digestive disorders specified as psychogenic in origin are grouped with the psychoneuroses in Section V, Mental, Psychoneurotic and Personality Disorders.

The group of conditions assigned to Section IX (I.S.C. Nos. 530-587) under the broad heading 'Diseases of the Digestive System' do not therefore represent a consistent enough collection of diseases to form a statistically meaningful category. 15,828 deaths in all were assigned during 1953 to the various diseases within the section, but in the same year there were 37,987 deaths from malignant and other neoplasms of the digestive system, and 522 from congenital malformations of digestive system. Malignant neoplasm is the most frequent cause of death when the digestive system is considered in its entirety.

In a general review, "congenital malformations of digestive system" (including for completeness cleft palate and harelip) are conveniently studied in conjunction with diseases of the digestive system. To distinguish between 'congenital' and 'acquired' is often difficult. For example, many of the hernias, which caused 118 deaths among infants under one year during 1953, were undoubtedly 'congenital,' and in the previous revision of the International List (5th, 1938) congenital hernias were assigned to malformations of the digestive system. It should also be noted that fibrocystic disease of the pancreas is assigned to "other diseases of the pancreas" unless it is specifically described as congenital, whereas fibrocystic disease of the liver is always classed to the 'congenital malformations' section, and that congenital anomalies of teeth form one of the fourth digit components of 'disorders of occlusion, eruption and tooth development' (I.S.C. No. 533.)

Certain fourth digit subdivisions of the International Classification relating to I.S.C. Nos. 530-587 distinguishing, *inter alia*, the different forms of hernia, are omitted from Tables 17 and 27, Part I. As they are important both in connexion with the points made in the preceding paragraph and in relation to sex-differentials and secular trends, Table XCIV (page 193) shows the sex and age distributions for deaths in 1953 as in Table 17, Part I, with additional detail for ages under 1 year in respect of I.S.C. Nos. 533 (.1 and .5); 539; 544; 560; 561; 581; 587.

The conditions classed as “ diseases ” and “ malformations ” of the digestive system are admittedly varied, but it is instructive to examine their mortality trends over the last 30 years in terms of a simple three-fold classification. Table XCV (page 195) shows the causes and cause groups responsible for over 90 per cent of the deaths assigned in 1953 to the I.S.C. numbers comprising “ Diseases and Congenital Malformations of the Digestive System ” under one or other of three heads:—

Group A. Non-specific acute or unspecified gastro-intestinal infection (Gastro-enteritis and colitis, diarrhœa of the newborn; gastritis and duodenitis).

Group B. Disorders which usually involve only localised anatomical or mechanical abnormalities or localised secondary infections amenable to surgery or chemotherapy (Diseases of teeth and mouth; appendicitis and peritonitis; hernia; obstruction; congenital pyloric stenosis; imperforate anus; cleft palate and harelip).

Group C. Disorders of a more general character which may involve dietary, metabolic, constitutional, or psychogenic ætiological factors (Peptic ulcer; chronic enteritis and colitis; diseases of liver and gall bladder).

The causes included in the three groups are shown in detail in Table XCV along with the crude death rates for each in 1933, 1943 and 1953. The rates in 1943 and 1953 are shown as percentages of the corresponding rates in 1933 and 1943. No allowance has been made for changes in classification between the 5th and 6th revisions, but infective hepatitis, which until 1950 was not distinguished from other diseases of the liver and gall bladder, has been included with these diseases. Allowance for other changes in classification is unlikely to alter materially the general picture, and the percentage changes in the rates between the years 1933, 1943 and 1953 give a reasonable indication of the relative orders of magnitude.

From 1933 to 1943, the crude rate declined in the three groups by about 30 per cent, 20 per cent and 7 per cent; from 1943 to 1953, while declining in Groups A and B by 74 per cent and 42 per cent, it rose in Group C by 4 per cent. Among points of interest are the following:—(1) the most notable decreases in mortality over each period were from gastro-enteritis (*i.e.*, Group A), and from appendicitis and peritonitis in Group B in which the decline was about 45 per cent between 1933 and 1943 and 55 per cent between 1943 and 1953; (2) there was a marked improvement during the later as compared with the earlier ten-year period in mortality from hernias and from the three malformations; (3) there was a more substantial fall in mortality from cholelithiasis and cholecystitis between 1933 and 1943 than between 1943 and 1953; mortality from hepatitis and other diseases of liver and gall bladder fell between 1933 and 1943, but had risen again by 1953.

The seven principal digestive disease groups in Table XCV are listed below according to the ranking of their crude death rates per million living in 1933 and 1953 along with the percentage increase or decrease in the crude death rate over the 20-year period. The marked decline in the mortality rates from gastro-enteritis and appendicitis (which ranked first and third in 1933 but sixth and seventh respectively in 1953) and the improvement in the rates for hernia, obstruction, and cholelithiasis and cholecystitis are consistent with progress in treatment of these diseases during the last twenty years.

Ranking order in 1933		Ranking order in 1953		Percentage increase or decrease in rate 1933/53
Disease group	Rate	Disease group	Rate	
1. Gastro-enteritis and diarrhoea	134	1. Peptic ulcer	117	+10
2. Peptic ulcer	106	2. Diseases of liver, &c.	40	+5
3. Appendicitis : Peritonitis	92	3. Hernia	36	—28
4. Cholelithiasis and cholecystitis	59	4. Cholelithiasis and cholecystitis	34	—42
5. Hernia	50	5. Obstruction, not hernia	32	—30
6. Obstruction, not hernia	46	6. Gastro-enteritis and diarrhoea	26	—81
7. Diseases of liver, &c.	38	7. Appendicitis: Peritonitis	23	—75

Improvements in diagnosis during the last twenty years will have increased the number of recognised cases and contributed to the rise in mortality from conditions in Group C such as peptic ulcer, the chronic forms of enteritis and colitis, and diseases of the liver, including infectious hepatitis. But in contrast to the diseases of Groups A and B, in which 24 per cent of the deaths in 1953 were of children, mortality from the diseases in Group C is largely confined to adults, the proportion of deaths in 1953 at 0-14 years being 1 per cent. Changes in the age-composition of the population must therefore be taken into account. The C.M.I's, for ulcer of stomach or duodenum cited below, show that the increase between 1943 and 1953 in the crude rate for this disease can be partly explained by the ageing population. The accompanying C.M.I's for cirrhosis of the liver indicate that after a substantial decline from 1931 to 1945, mortality has ceased to fall, and among females there has even been a slight rise.

			1931-1933	1934-1936	1937-1939	1940-1942	1943-1945	1946-1950	1951	1952	1953
C.M.I's (1938= 1·00)	Ulcer of stomach and duodenum	M.	0·95	0·99	1·02	1·13	1·06	0·94	1·09	1·03	0·96
		F.	1·14	1·13	1·03	1·03	0·87	0·88	1·09	1·04	1·05
	Cirrhosis of liver	M.	1·29	1·13	0·97	0·82	0·59	0·57	0·65	0·67	0·67
		F.	1·22	1·03	0·98	0·71	0·57	0·65	0·92	0·86	0·90

The fact that a crude death rate does not fall, however, may be disguising the situation where treatment is prolonging lives which the disease would formerly have claimed at a younger age. The effect would be that mortality at younger ages declines while mortality at older ages increases. Such transfers of mortality from younger to older adult ages may of course represent appreciable advances

in treatment. Table XCVI (page 197) (continuing Table CXXIII in the 1948/49 Text) shows the annual death rates per million living by sex and age from ulcer of the stomach and ulcer of the duodenum from 1950 to 1953 in single years. The following table, expressing rates in 1931-33, in 1949 and in 1953 as percentages of rates in 1940-42, contrasts the trend at different ages of mortality from ulcer of the stomach and ulcer of the duodenum.

		35—		45—		55—		65—		75 and over	
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Ulcer of the stomach											
1931-33	..	106	155	103	164	69	115	73	93	69	79
1940-42	..	100	100	100	100	100	100	100	100	100	100
1949	..	38	45	60	55	68	68	94	93	124	106
1953	..	19	30	37	43	49	51	100	86	169	156
Ulcer of the duodenum											
1931-33	..	91	100	91	107	66	92	70	79	75	100
1940-42	..	100	100	100	100	100	100	100	100	100	100
1949	..	66	71	92	93	94	108	125	119	143	154
1953	..	45	57	74	87	99	115	168	167	253	296

The transfer of mortality from younger to older ages, which was noted in the 1948-49 Text, has thus continued in evidence between 1949 and 1953.

Table XCIV.—Deaths from certain diseases of the digestive system according to sex and age, 1953

Int. Classn. (1948) Nos.	Disease, etc., and Int. Classn. Nos. of the 4th digit sub-divisions	All ages	Age																								
			Under 4 weeks	Months			Years																				
				1—2	3—5	6—8	9—11	1—	2—	3—	4—	5—	10—	15—	20—	25—	30—	35—	40—	45—	50—	55—	60—	65—	70—	75—	80—	85 & over
533	Disorders of occlusion, eruption etc. Disorders of first dentition (incl. teething) (533.1) { M F	8 6	— —	2 2	1 —	3 3	2 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
539	Congenital anomalies of teeth (533.5) { M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
539	Diseases of œsophagus Functional disorders of œsophagus (539.0) { M F	8 11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
			— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
544	Other diseases of œsophagus (539.1) { M F	50 29	— 1	— —	1 —	— —	— —	— —	— —	— —	— —	— —	2 —	1 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
			— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
544	Disorders of function of stomach Disorders of gastric secretion (544.0) { M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
			— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
544	Disorders of gastric motility (incl. dilation of stomach) (544.1) { M F	10 3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
			— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
544	Other disorders of function (544.2) { M F	4 3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
			— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
560	Hernia, without mention of obstruction Inguinal (560.0) { M F	66 6	— —	1 —	— —	1 —	1 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
			— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
560	Femoral (560.1) { M F	3 9	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
			— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
560	Umbilical (incl. exomphalos) (560.2) { M F	35 33	26 16	1 —	1 —	— —	1 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
			— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
560	Ventral (incisional) (560.3) { M F	9 23	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
			— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
560	Other specified site (incl. dia- phragmatic hernia) (560.4) { M F	65 71	33 15	1 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
			— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
560	Unspecified site (560.5) { M F	4 5	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
			— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —

Table XCIV.—continued.

Int. Classn. (1948) Nos.	Disease, etc., and Int. Classn. Nos. of the 4th digit sub-divisions	All ages	Age																			85 & over					
			Under 4 weeks	Months					Years																		
				1—2	3—5	6—8	9—11	1—	2—	3—	4—	5—	10—	15—	20—	25—	30—	35—	40—	45—	50—		55—	60—	65—	70—	75—	80—
561	Hernia, with mention of obstruction Inguinal (561.0) Femoral (561.1) Umbilical (incl. exomphalos) (561.2) Ventral (incisional) (561.3) Other specified site (incl. dia- phragmatic hernia) (561.4) Unspecified site (561.5) Cirrhosis of liver Without mention of alcoholism (581.0) With alcoholism (581.1) Diseases of the pancreas Acute pancreatitis (587.0) Chronic pancreatitis (587.1) Other diseases of pancreas (incl. fibrocystic diseases) (587.2)	{ M F 355 60 75 341 39 98 23 108 54 50 30 17 608 479 42 26 134 218 21 30 48 59	1	8	—	—	1	2	1	—	—	—	—	1	2	—	1	8	7	15	29	42	55	73	65	44	
			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	4	2	10	13	12	6
			—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	5	4	11	16	11	9
			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	4	3	3	10	5	9
			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	5	12	29	3
581	Cirrhosis of liver Without mention of alcoholism (581.0) With alcoholism (581.1) Diseases of the pancreas Acute pancreatitis (587.0) Chronic pancreatitis (587.1) Other diseases of pancreas (incl. fibrocystic diseases) (587.2)	{ M F 608 479 42 26 134 218 21 30 48 59	2	2	2	1	1	—	—	—	—	—	—	—	—	—	—	—	76	87	82	79	43	22	7		
			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	43	57	105	63	42	23	6	
			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	13	7	3	2	—	—
			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	6	3	1	1	—	—
			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	2	2	6	4	8	4	2
587	Diseases of the pancreas Acute pancreatitis (587.0) Chronic pancreatitis (587.1) Other diseases of pancreas (incl. fibrocystic diseases) (587.2)	{ M F 134 218 21 30 48 59	1	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	76	87	82	79	43	22	7		
			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	43	57	105	63	42	23	6	
			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	13	7	3	2	—	—
			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	6	3	1	1	—	—
			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	2	2	6	4	8	4	2

Table XCV.—Changes between 1933 and 1953 in the mortality rate at all ages, from diseases and malformations of the digestive system

Int. List No. (5th Revision)	Int. Classn. No. (6th Revision)	Cause of death	Number of deaths			Death rate per million living			Percentage change + or —	
			1933	1943	1953	1933	1943	1953	1943 — 1933	1953 — 1943
Group A										
118(1)	543	Gastritis and duodenitis	900	403	147	22	10	3	—55	—70
119(a), 120(a)	571; 764	Gastro enteritis and diarrhœa	*5,406	*4,395	1,155	134	104	26	—22	—75
Total, Group A			6,306	4,798	1,302	156	114	30	—27	—74
Group B										
115(a); 115(d)	530-538	Diseases of teeth and mouth	562	269	140	14	6	3	—57	—50
121; 129	550-553; 576-577	} Appendicitis; peritonitis	3,730	2,176	1,035	92	51	23	—45	—55
122(b)	570		Intestinal obstruction without mention of hernia	1,837	1,815	1,411	46	43	32	— 7	—26
122(a)	560-561	Hernia of abdominal cavity	2,007	2,340	1,579	50	55	36	+10	—35
157(e)	756.0	Congenital hypertrophic pyloric stenosis	310	339	64	8	8	1	0	—87
157(g)	756.1	Imperforate anus	67	59	41	2	1	0.9	—50	—10
157(f)	755	Cleft palate and harelip	117	87	22	3	2	0.5	—33	—75
Total, Group B			8,630	7,085	4,292	214	168	97	—21	—42

Table XCV.—*continued.*

Int. List No. (5th Revision)	Int. Classn. No. (6th Revision)	Cause of death	Number of deaths			Death rate per million living			Percentage change + or —	
			1933	1943	1953	1933	1943	1953	1943 1933	1953 1943
Group C										
116	539	Diseases of œsophagus	51	62	98	1	1	2	0	+100
117	540-542	Ulcer of stomach and duodenum (peptic ulcer)	4,282	4,815	5,168	106	114	117	+ 8	+ 3
123(a)	572.1	Diverticulitis	411	490	613	10	12	14	+20	+17
119(b); 120(b)	572.0., 2.3	Chronic and ulcerative colitis and enteritis	444	532	529	11	13	12	+18	— 8
126; 127(a)	584-585	Cholelithiasis and cholecystitis	2,380	1,584	1,484	59	37	34	—37	— 8
124-125; 127(b)	580-583; 092; 586	Hepatitis †, cirrhosis, and other diseases of liver and gall bladder	+1,522	+1,386	+1,766	38	33	40	—13	+21
Total, Group C			9,090	8,869	9,658	225	210	219	— 7	+ 4
Remainder										
118(2), 123(b) 128, 157(ic)	Others in 530-587 756	Other diseases and congenital malformations of the digestive system	†1,310	1,233	1,468	32	29	33	— 9	+14
All diseases and congenital malformations of digestive system (total of above)										
115-129 excluding 115(b) + (c)	530-587 092; 764	Diseases of digestive system	24,497	20,972	16,176	607	496	367	—18	—26
157(e) - (g) 157 (ic)	755-756	Congenital malformations of digestive system	†839	1,013	544	21	24	12	+14	—50
Total, All conditions			†25,336	†21,985	16,720	628	520	379	—17	—27

Including Non-civilians

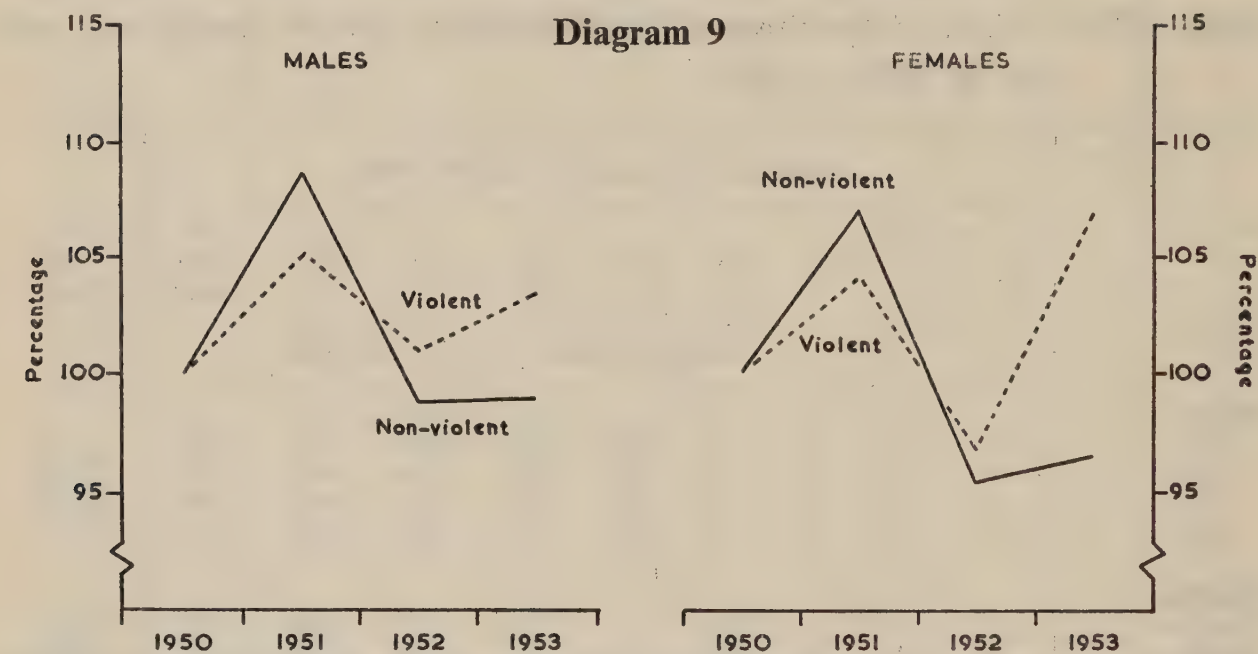
- * Includes regional enteritis (572.0) for 1933 and 1943 (number of deaths in 1943 estimated to have been 69)
† Including infective hepatitis (092 in 6th Revision) throughout (classified to other diseases of liver in 5th Revision List)
‡ Including estimated total for remaining congenital malformations

Table XCVI.—Ulcer of the Stomach and Duodenum: Death rates by sex and age in 1950 to 1953

		Annual death rates per million living									C.M.I. all ages
		0—	5—	15—	25—	35—	45—	55—	65—	75 and over	
Ulcer of Stomach (I.S.C. No. 540)											
Males											
1950	..	1	0	2	8	40	107	281	456	592	0·727
1951	..	1	0	3	9	32	121	264	486	652	0·744
1952	..	2	—	3	5	29	101	235	467	684	0·692
1953	..	1	—	1	6	21	91	203	422	727	0·631
Females											
1950	..	1	—	1	3	9	22	65	148	310	0·821
1951	..	2	1	0	3	7	22	62	156	365	0·879
1952	..	1	—	1	2	9	23	55	155	351	0·851
1953	..	2	—	0	2	6	19	51	141	368	0·817
Ulcer of Duodenum (I.S.C. No. 541)											
Males											
1950	..	—	0	4	17	49	134	234	370	413	1·209
1951	..	1	—	7	16	58	140	257	476	573	1·429
1952	..	1	—	6	16	48	127	241	456	605	1·347
1953	..	1	—	1	12	36	111	240	428	633	1·260
Females											
1950	..	1	0	0	2	6	14	33	60	111	1·329
1951	..	1	—	1	2	7	15	31	74	143	1·523
1952	..	1	—	1	2	6	15	31	67	132	1·448
1953	..	1	—	0	2	4	13	30	72	160	1·510

ACCIDENTAL AND VIOLENT DEATHS

There were 12,333 male and 7,531 female deaths in 1953 from accidental and violent causes, compared with an annual average of 12,115 male and 7,034 female deaths during 1950 to 1952. Diagram 9 shows death rates from violent and non-violent causes during 1951 to 1953 as percentages of those in 1950. In 1952 and 1953, non-violent death rates for both sexes were lower than in 1950, but male rates from violent causes were in excess of those in 1950, and female rates, although lower in 1952 than in 1950, were 7 per cent in excess in 1953. The percentage of total deaths due to accidents and violence continued to increase for both males and females in 1953, in each age-group except that of children under 15 years (Table XCVII, page 209).



Violent (including accidental) and Non-violent causes. Death rates per million living 1951-53 expressed as percentages of 1950.

Table XCVIII (page 209) shows that the death rate per million living from violent causes increased in 1953 as compared with 1952 at ages 45 and over for men and 25 and over for women. The rate for men aged 20-24, however, showed a welcome reduction from 643 in 1952 to 603 in 1953.

Motor vehicle accidents, accidental falls and suicides were the most frequent causes of violent death, and the rates for these were all higher in 1953 than in 1952. The crude death rates per million living from these and some other accidental and violent causes during 1950 to 1953 were as follows:—

Cause of Death and I.S.C. No.				1950	1951	1952	1953
All Violent and Accidental Causes (E800-E999)				562	591	568	582
				308	321	298	329
Motor vehicle accidents (E810-E835)	..	..	M	151	161	149	158
			F	46	49	42	45
Other road vehicle accidents (E840-E845)	..	..	M	14	11	11	9
			F	4	3	3	3
Accidental poisoning by gases and vapours (E890-E895)			M	10	12	12	15
			F	11	13	13	14
Accidental falls (E900-E904)	..	..	M	74	86	79	84
			F	113	117	105	123
Accidental mechanical suffocation (E921-E925)	..		M	23	23	22	19
			F	14	14	13	13
Accidental drowning and submersion (E929)	..	..	M	36	36	34	34
			F	9	9	8	8
Suicide and self-inflicted injury (E970-E979)	..	..	M	136	135	132	142
			F	70	72	68	76

Deaths in transport accidents

The numbers of deaths in transport accidents and the death rates per million living at all ages during 1950 to 1953 were as follows:—

Type of transport accident (and I.S.C. No.)		1950		1951		1952		1953	
		Number	Rate	Number	Rate	Number	Rate	Number	Rate
Railway (E800-E802)	M	331	16	301	14	390	18	342	16
	F	38	2	33	1	59	3	25	1
Motor vehicle (E810-E835)	M	3,187	151	3,396	161	3,147	149	3,342	158
	F	1,043	46	1,114	49	970	42	1,033	45
Other road vehicle (E840-E845)	M	294	14	238	11	229	11	181	9
	F	95	4	68	3	76	3	66	3
Water transport (E850-E858)	M	186	9	145	7	137	6	147	7
	F	3	0	8	0	7	0	6	0
Aircraft (E860-E866)	M	230	11	273	13	291	14	190	9
	F	10	0	23	1	20	1	2	0

Railway accidents caused 367 deaths in 1953, compared with 449 in 1952. The reduction was almost entirely in deaths of passengers—48 as compared with 141—deaths of employees numbering 187 and 193 in 1952 and 1953 respectively.

Motor and other vehicle accidents

Motor vehicle accidents on public highways caused the deaths of 3,225 males and 1,021 females in 1953, increases of 7 per cent for both sexes on the numbers in 1952. In addition, 117 males and 12 females were killed in accidents involving motor vehicles but not on public highways, and 181 males and 66 females died of accidents in which other road vehicles were concerned. The crude death rates per million living are shown in the table above.

Table XCIX (page 210) shows the death rates from motor vehicle accidents at different ages. Rates for boys under 15 were lower than in 1952, but those for girls increased. Male rates increased in each age-group from 15 onwards except at ages 35-44 and the C.M.I. rose from 0·71 to 0·75. Among women the only decreases from the 1952 rates were in the age-groups 25-34 and 65-74; the C.M.I. increased from 0·62 to 0·65.

Death rates of residents in the standard regions and urban/rural aggregates are shown in Table C (page 211). Of the latter, Greater London had the lowest rates for males under 65 but highest for those aged 65 and over. Death rates of girls under 15 were also lowest in Greater London and those of elderly women were highest. For men aged 45 to 64, the rate of 196 in rural districts was more than double that of 93 in Greater London. Comparing regional rates for 1953 with 1951, female rates at all ages had either decreased or remained unchanged in the Northern and Midland regions and in the East and West Ridings, but had increased at all ages in the North Western region; the rise in the rate for girls under 15 from 48 to 66 being especially noteworthy.

Table CI (page 212) shows the numbers of deaths from motor and road vehicle accidents according to the type of road-user killed. There were 1,262 male and 710 female deaths of pedestrians in 1953, 44 more than in 1952. Deaths of motor cyclists increased from 1,012 to 1,050 for males and from 79 to 96 for females.

Water transport accidents

There were 147 male and 6 female deaths in water transport accidents during 1953. During the four years 1950 to 1953, a total of 615 male and 24 female deaths occurred. The male deaths were distributed as follows:—

	Number	Percentage
Submersion, occupant of small boat (E850)	206	34
Other submersion (E851)	167	27
Falls from one level to another, not on stairs (E853)	89	14
Other falls (E852, E854, E855)	35	6
Machinery accidents (E856)	24	4
Other specified accidents (E857)	93	15
Accidents of unspecified cause (E858)	1	0
Total ..	615	100

There was an average of 154 male and 6 female deaths a year, of whom 54 persons annually were drowned from small boats. Only 4 per cent of the deaths were attributed to machinery accidents and of the remaining fatal accidents it is impossible to say how many occurred during work. The age distribution of the male deaths was as follows:—

	Under 15	15–	20–	25–	35–	45–	55–	65 and over	Total
Number ..	38	72	104	119	107	91	63	21	615
Per cent ..	6	12	17	19	18	15	10	3	100

Aircraft accidents

There were 190 male and 2 female deaths in 1953 due to aircraft accidents, compared with 291 male and 20 female deaths in 1952. Accidents to personnel in military aircraft declined from 222 to 175. The death rates per million living by sex and age, which are mostly based on very small numbers, are shown in Table CII (page 213). The high male rate of 61·69 for the age-group 20-24 was due to the fact that 84 deaths of personnel in military aircraft occurred among these young men.

Accidental poisoning

During 1953, 136 males and 152 females died of accidental poisoning by solids and liquids and a further 322 males and 322 females of accidental poisoning by gases and vapours. As will be seen from the following table, most of the cases of gas or vapour poisoning were due to illuminating gas.

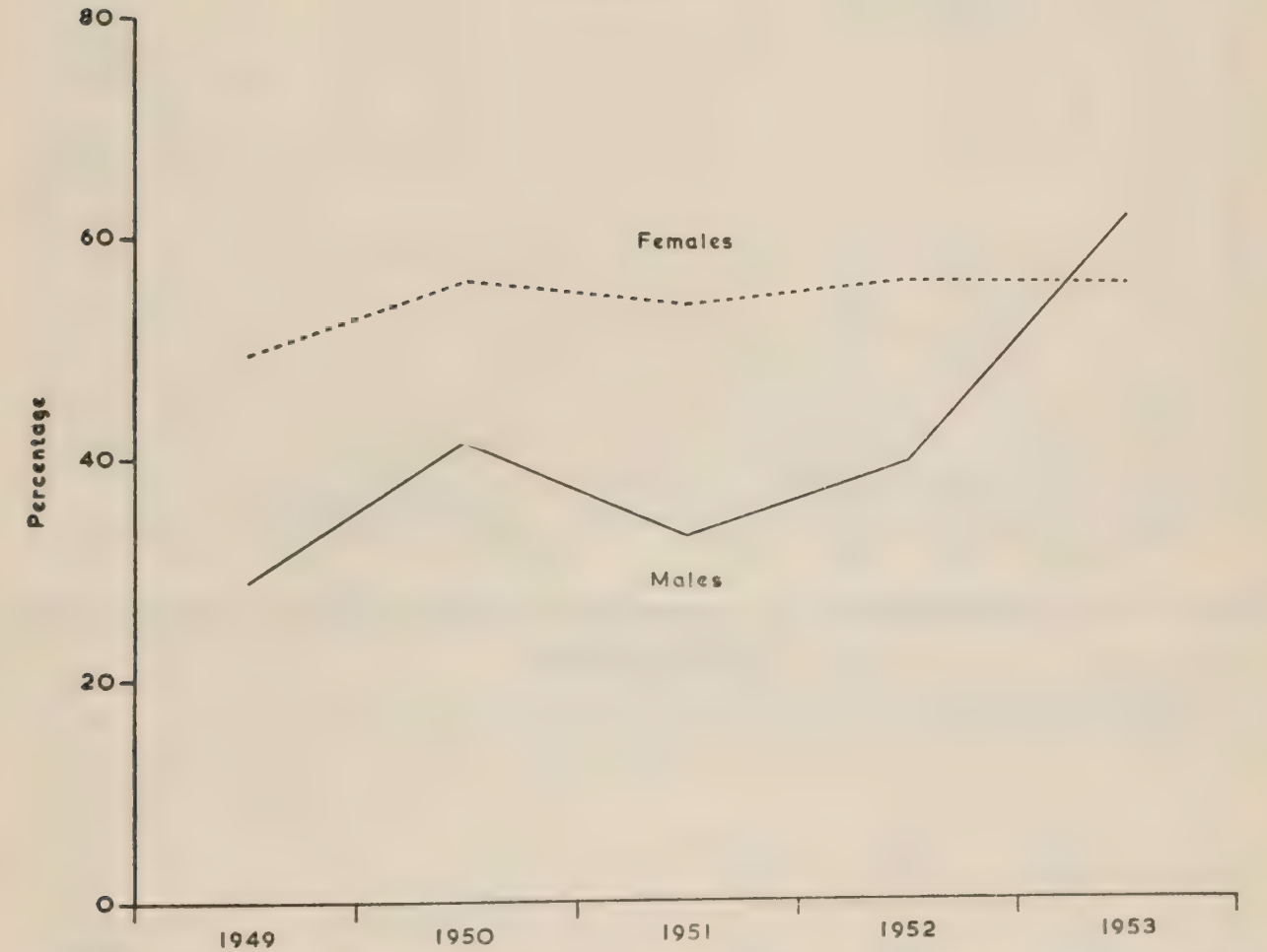
	1949		1950		1951		1952		1953	
	M	F	M	F	M	F	M	F	M	F
All solids and liquids (E870-E888)										
Number	93	101	113	142	121	143	154	141	136	152
Rate per million	5	4	5	6	6	6	7	6	6	7
Barbituric acid (E871)										
Number	27	50	47	80	40	77	61	79	84	85
Per cent of all solids and liquids ..	29	50	42	56	33	54	40	56	62	56
All gases and vapours (E890-E895) ..										
Number	229	235	208	255	252	304	246	302	322	322
Rate per million	11	10	10	11	12	13	12	13	15	14
Illuminating gas (E890)										
Number	195	226	158	248	215	300	203	295	279	312
Per cent of all gases and vapours ..	85	96	76	97	85	99	83	98	87	97

The proportion of deaths from all poisonous solids and liquids due to barbituric acid poisoning has remained fairly stationary since 1950 in the case of females whereas for males it has been increasing. (See Diagram 10). The death rates per million living at different ages from poisoning by illuminating gas were as follows during 1950 to 1953:—

					Males				Females			
					1950	1951	1952	1953	1950	1951	1952	1953
0—	..	..	..	..	1.6	4.2	3.3	6.3	—	2.8	2.3	1.2
5—	..	..	..	..	.7	1.3	.6	1.8	.7	1.7	1.3	.6
15—	..	..	..	..	3.7	3.4	4.6	5.7	3.1	3.4	3.6	3.5
45—	..	..	..	..	9.5	15.5	9.2	12.8	8.0	9.2	11.3	12.6
65 and over	..	..	..	..	36.2	48.6	53.6	72.3	61.1	71.9	64.3	68.0
All ages	..	..	..	..	7.5	10.2	9.6	13.2	10.9	13.2	12.9	13.6

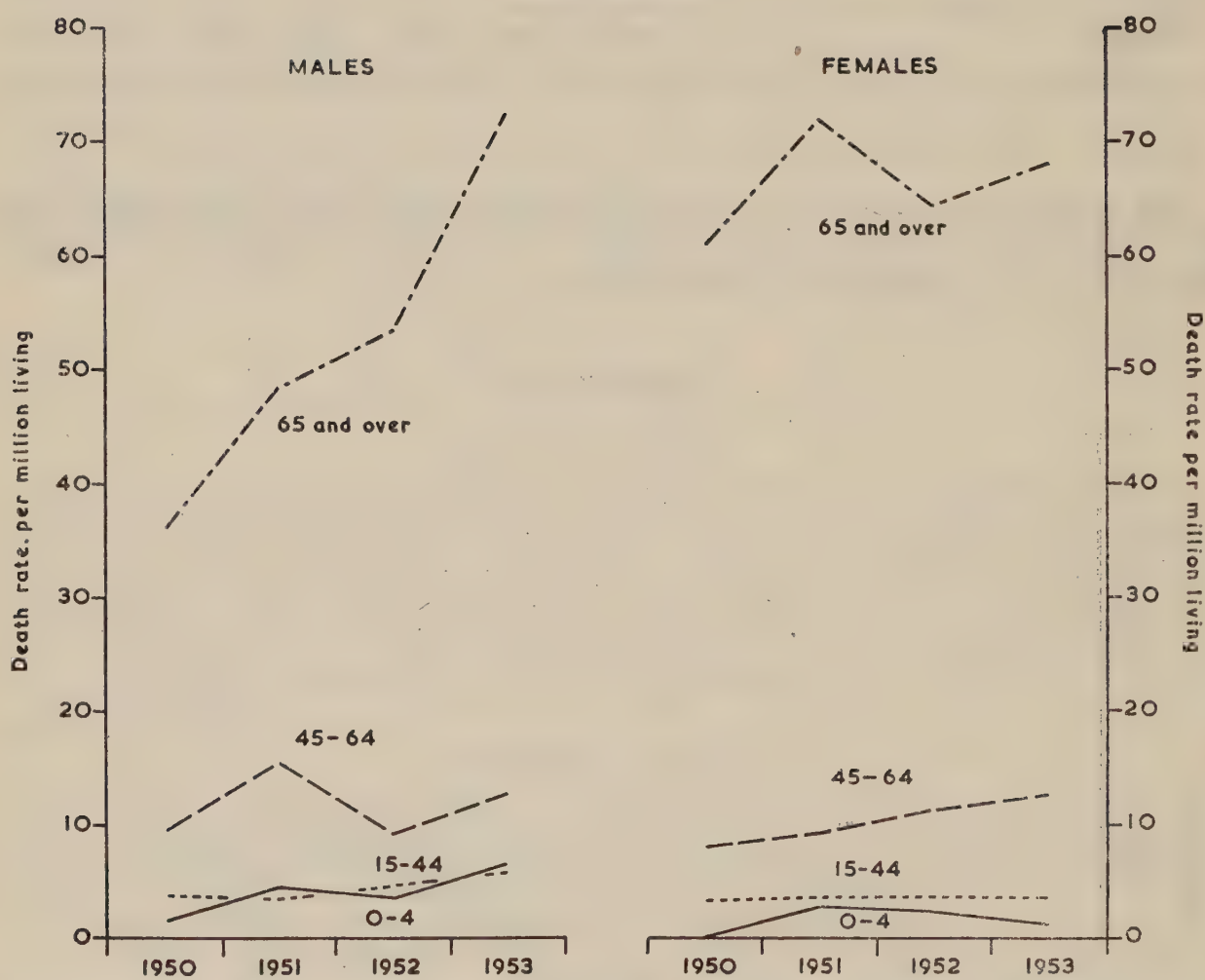
The rates are particularly high among those aged 65 and over, and in the case of elderly men have almost doubled (36.2 compared with 72.3) during the four years. (See Diagram 11, page 202).

Diagram 10



Deaths from accidental barbituric acid poisoning (E871) per cent of all accidental poisoning by solids and liquids (E870-E888), 1949 to 1953.

Diagram 11



Death rates per million living by sex and age from accidental poisoning by illuminating gas (E890), 1950-1953.

Burns (N940-N949)

During the three years, 1951 to 1953, 2,209 people (M. 839; F. 1,370) were burned to death in England and Wales. Of these, 374 were children under 5 years of age and 720 old people of 75 and over. The average annual regional death rates per million during the three years were as follows:—

	0-4		5-14		15-24		25-44		45-64		65-74		75 and over		All ages	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
England and Wales ..	29	42	5	14	6	3	8	3	9	11	22	44	117	166	13	20
All conurbations : ..	22	37	5	15	3	2	5	3	7	11	24	46	128	195	11	20
Tyneside	36	28	—	11	7	6	3	—	10	13	26	51	200	159	14	17
West Yorkshire ..	39	56	9	21	8	6	6	4	18	7	19	61	123	279	17	27
South East Lancashire	27	38	6	24	5	2	6	—	7	22	23	51	207	213	14	24
Merseyside	26	59	3	21	—	—	3	3	9	10	36	48	182	118	12	19
West Midlands ..	31	43	8	18	—	—	8	3	5	8	23	58	122	252	12	22
Greater London ..	12	27	5	10	3	2	5	3	5	9	24	37	94	175	9	17
Areas outside conurbations	33	45	4	13	7	4	9	3	10	10	21	42	112	154	14	20
Regional summary :—																
Northern	43	65	7	17	9	6	17	4	19	14	61	44	145	208	23	24
East and West Ridings	43	53	8	17	3	8	5	4	15	9	18	6	134	219	15	24
North Western ..	26	47	4	23	7	4	5	2	9	15	24	50	157	191	13	23
North Midlands ..	30	43	1	18	12	3	7	3	12	13	12	49	102	136	13	20
Midland	28	36	5	13	1	1	5	3	6	9	13	59	135	224	11	21
Eastern	28	38	7	5	6	5	10	4	7	7	29	33	118	115	15	16
Southern	33	32	2	9	1	—	5	3	7	5	11	27	76	133	9	15
London and South																
Eastern	13	30	4	10	4	2	6	3	4	9	20	33	102	161	9	17
South Western ..	25	32	5	5	9	4	13	8	3	11	23	49	69	141	12	19
Wales I (South East) ..	60	45	2	30	9	—	18	6	19	13	6	53	130	172	20	23
Wales II (Remainder) ..	57	107	6	—	—	7	13	—	19	17	25	37	175	167	22	25

The death rates for children under 5 were noticeably high in the West Yorkshire conurbation and lowest in Greater London. At ages 5-14 girls' rates exceeded those for boys in each conurbation and in most of the regions. Women's rates exceeded men's at ages 65-74 in each conurbation and in every region except the Northern and the East and West Ridings. Old people of 75 and over had high rates in the South East Lancashire conurbation, and in the West Yorkshire and West Midlands conurbations the rates for elderly women were also considerably in excess of the average rate for all conurbations.

Suicides

In 1953, 3,020 males and 1,734 females committed suicide. In total, this is about the same as the number of deaths from road vehicle accidents. The numbers of suicidal deaths in the years 1949 to 1953 and the crude death rates were as follows:—

			1949	1950	1951	1952	1953
Males							
Numbers .. ..	..	..	3,053	2,885	2,831	2,788	3,020
Rates per million	..	..	144	136	135	132	142
Females							
Numbers .. ..	..	..	1,697	1,586	1,638	1,550	1,734
Rates per million	..	..	75	70	72	68	76

The crude death rate in 1953 was the highest for both males and females since 1949.

The Criminal Statistics* for 1953 showed that according to returns of coroners' verdicts, 4,290 persons committed suicide in 1952 and 4,658 in 1953†. Cases of attempted suicide which were known to the police numbered 4,484 in 1952 and 4,816 in 1953.

The percentage of effective suicides as measured by the ratio

Verdicts

Verdicts + cases attempted

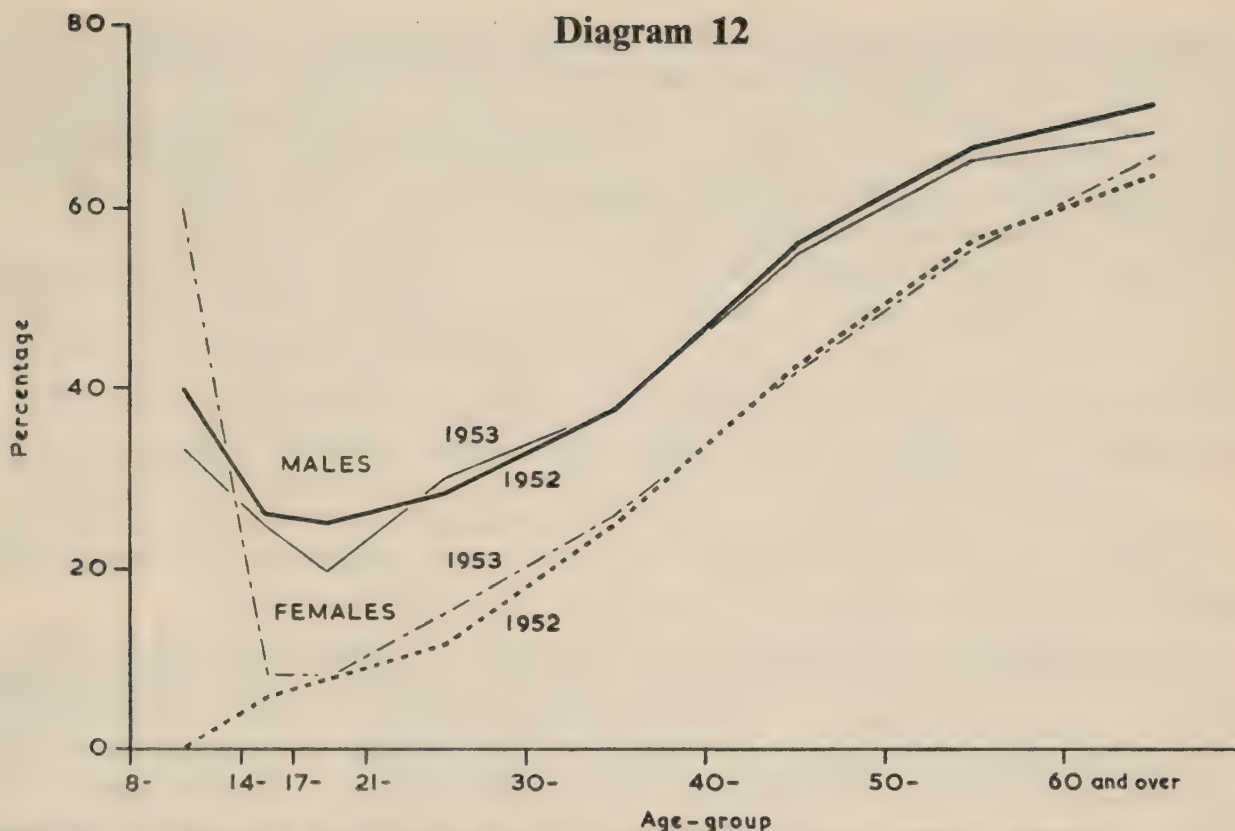
varied by age as follows:—

Ages						Males		Females	
						1952	1953	1952	1953
8 and under	14	..	..			40	33	0	60
14	..	..	17	..	..	26	25	6	8
17	..	..	21	..	..	25	20	8	8
21	..	..	30	..	..	28	30	12	15
30	..	..	40	..	..	38	38	25	26
40	..	..	50	..	..	56	55	43	42
50	..	..	60	..	..	67	66	57	56
60 and over	..	..	..	..	..	72	69	64	66

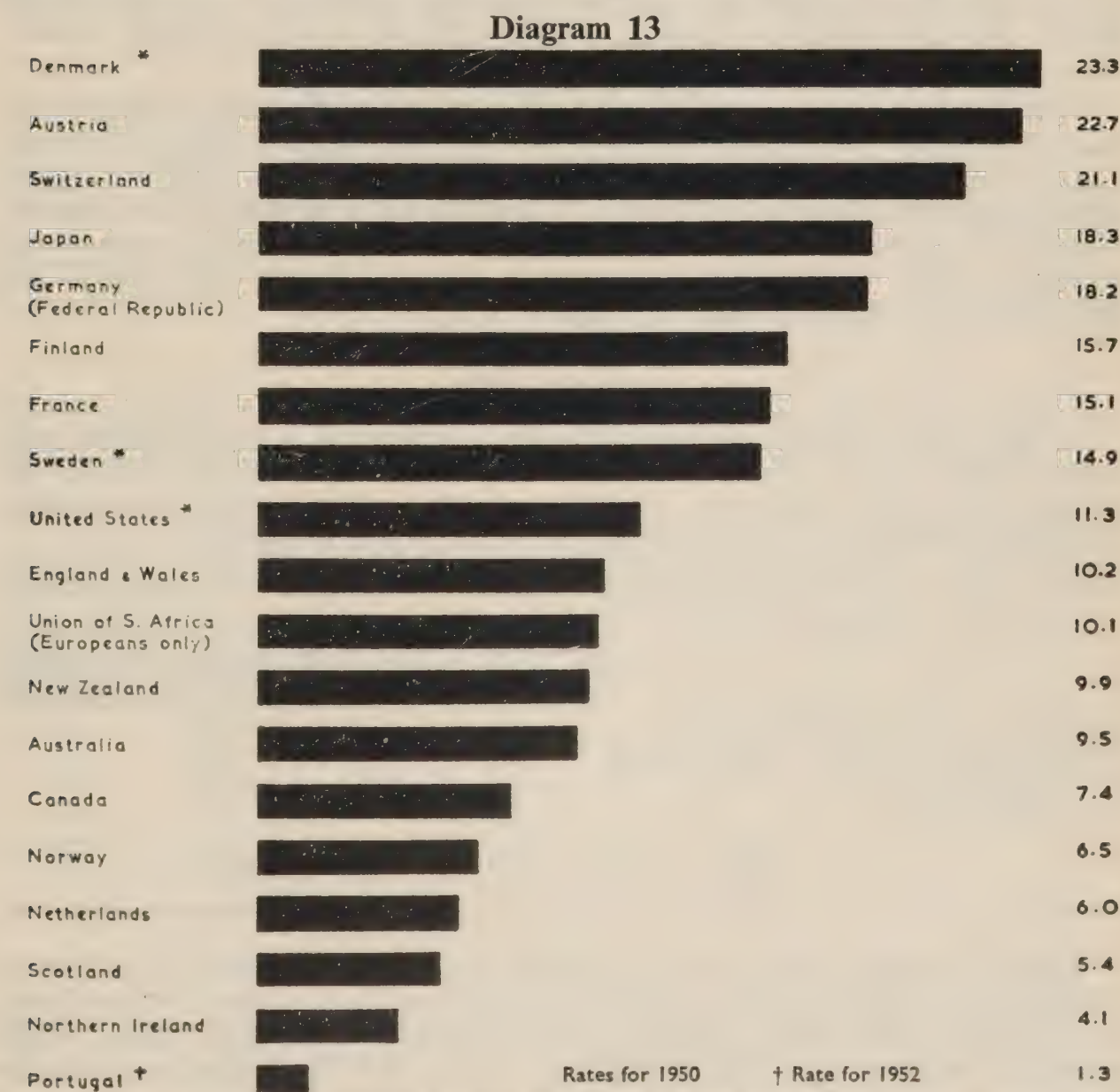
The effective percentages among young females were much lower than those among young males, due to a preponderance of actual suicides among the latter and of attempts reported to the police among the former. For both sexes the percentages increased with age, the difference between them gradually dwindling. At ages 60 and over, males had not only an excess of verdicts over females, but also an excess in the number of attempts reported. (See Diagram 12, page 205).

Suicide rates‡ per 100,000 inhabitants for nineteen countries are compared in Diagram 13 (page 205) ; the rates are for 1951 unless otherwise stated. Some countries do not publish separate suicide rates, the statistics of others are based on very small numbers and not all countries have a reliable standard of death reporting. The countries selected are probably fairly free from these defects. The rates ranged from 23·3 per 100,000 in Denmark to 1·3 in Portugal. Northern Ireland and Scotland had the second lowest rates. The United States and England and Wales occupied the ninth and tenth places with rates of 11·3 and 10·2 respectively.

* Criminal Statistics. England and Wales, 1953. London, H.M.S.O. (Price 5s. 6d.)
† The numbers of suicides given annually in the Criminal Statistics are always a little less than those given by the Registrar General, owing to differences in reporting.
‡ Data from Demographic Year Book of the United Nations, 1953.



Effective percentage of attempted suicides according to sex and age, 1952 and 1953.



Suicide: Death rates per 100,000 persons living, 1951.

Suicide rates in England and Wales per million living are shown by age in Table CIII (page 214). The rates were higher for both sexes in 1953 than in 1952 in each age-group from 20 onwards, and the Comparative Mortality Indices increased for males from 0.69 to 0.74 and for females from 0.79 to 0.89. The ratios of the 1953 rates to the average annual rates for the period 1901-10 at ages 15 and over were as follows:—

	All ages	15–	20–	25–	35–	45–	55–	65–	75 and over
Males ..	0.90	0.78	0.74	0.59	0.50	0.56	0.62	0.81	1.26
Females ..	1.55	0.29	0.49	0.70	0.98	1.17	1.55	1.94	2.59

Among males only the age-group 75 and over had higher rates in 1953 than at the beginning of the century, whereas rates were higher among women from age 45 onwards.

Domestic gas was the principal suicidal agent used by both sexes in 1953—421 per 1,000 male suicides and 543 per 1,000 females. For men hanging (176 per 1,000) and drowning (85 per 1,000) came next in order of importance, whereas for women poisoning by analgesic and soporific drugs (146 per 1,000) and drowning (125 per 1,000) were second and third in order of preference. Table CIV (page 214), based on the numbers of suicides in the period 1950-53, shows that the predilection for coal-gas poisoning was common to each sex-age group; the same applies to hanging and strangulation among men and ‘ other ’ forms of poisoning among women.

Table CV (page 215) shows the mean annual death rates during 1949-53 in the standard regions. Male rates in each region increased steadily with age, whereas female rates were highest at ages 55-64, except in the North Western region. Male rates were consistently above the national level at all ages in the East and West Ridings and the North Western region, and so were female rates in the Midland region. Rates for women of 65 and over in Wales were only 57 per cent of the national rate in that age-group.

Accidental falls

In 1953, 4,599 people died as a result of accidental falls, compared with 4,078 in 1952 and 4,473 in 1951. The crude death rate for males in 1953 was 84 per million living, and for women 123 per million. The distribution according to whether the fatal fall was from a height or not was as follows :—

	Males		Females	
	Numbers	Percentage	Numbers	Percentage
From stairs and ladders (E900,E901) ..	413	23	500	18
Other falls from one level to another (E902)	512	29	222	8
On the same level (E903)	562	31	1,183	42
Unspecified (E904)	300	17	907	32
Total	1,787	100	2,812	100

Table CVI (page 216) shows the death rates per million living from falls at different ages. Male rates at ages 35 and over and female rates at 45 and over were higher in 1953 than in 1952. The Comparative Mortality Indices, which showed a decrease in 1952, increased in 1953 to 0.68 for males and 0.75 for females.

Death rates by age in the conurbations and in areas of various sized populations are shown in Table CVII (page 217). Rates for both sexes were highest in the West Yorkshire conurbation, especially at ages 75 and over, and lowest in Greater London. Male rates at ages 75 and over were lower in 1953 than in 1951 in all conurbations except Tyneside. In areas outside the conurbations, male rates were lowest in rural districts and female rates in urban areas with populations of 100,000 and over. Rates for old people of 75 and over were lowest in rural districts although those for 1953 were higher by 8 per cent for men and 10 per cent for women than in 1951.

More than two-thirds of fatal falls occurred at home and in resident institutions during 1949-53 (see Table CVIII (page 217)). During these years, an average of 20 persons a year suffered a fatal fall at some form of sport.

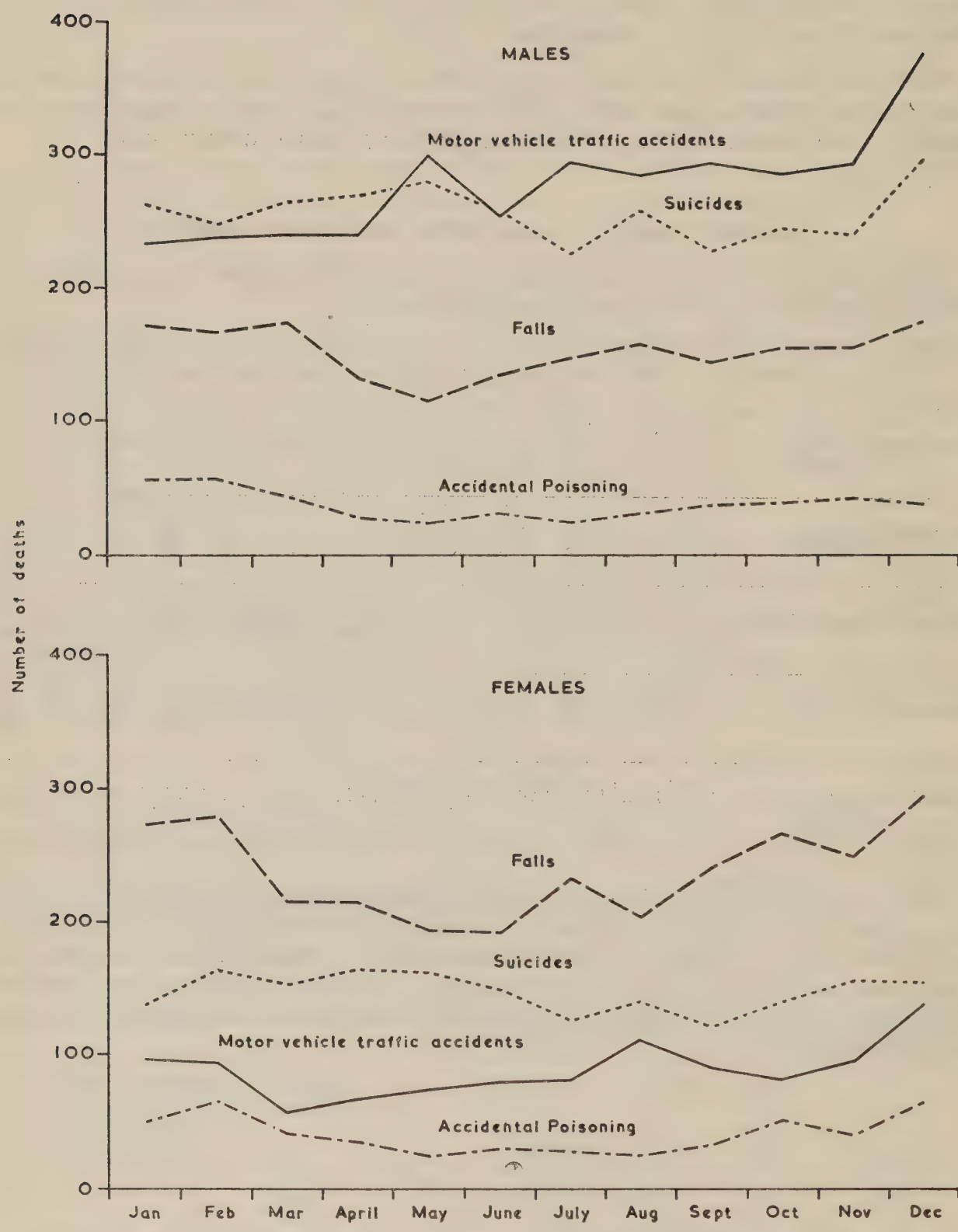
Seasonal variation in accidental and violent deaths

The numbers of deaths from accidental and violent causes during 1953, per standardised month of 31 days, were as follows:—

Type of accident		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Motor vehicle traffic (E810-E825)	{ M	233	239	240	240	299	256	294	284	293	286	292	375
	{ F	97	95	58	67	74	80	81	111	91	81	96	138
Accidental poisoning (E870-E895)	{ M	57	58	45	29	23	31	26	31	38	40	43	39
	{ F	50	66	41	36	24	30	29	25	32	52	40	64
Accidental falls (E900-E904)	{ M	171	169	175	133	115	137	148	158	146	156	156	176
	{ F	275	280	215	215	195	192	233	203	240	269	250	296
Suicides (E970-E979) ..	{ M	262	249	265	270	280	257	226	259	228	245	239	297
	{ F	139	166	155	166	162	151	127	141	123	140	157	154
All accidents and violence (E800-E999)	{ M	1,080	1,181	1,036	979	1,042	1,006	1,028	1,092	1,000	1,008	1,018	1,155
	{ F	737	889	596	621	574	544	574	569	578	636	648	765

For all accidental and violent causes the greatest number of deaths occurred during the winter months of January, February and December. Male deaths were also high in August. The lowest number of male deaths occurred in April, and of females in June. The pattern of winter maximum and summer minimum is also seen (Diagram 14, page 208) in the case of accidental poisoning, suicides and falls.

Diagram 14



Monthly variation in certain accidental and violent deaths, 1953.

Table XCVII.—Accidents and violence: Proportion of deaths attributed to violent causes per 100 deaths from all causes, by sex and age, 1901 to 1953

		Males					Females				
		0–	15–	35–	65 and over	All ages	0–	15–	35–	65 and over	All ages
1901–10	...	3·22	12·88	7·22	2·31	5·05	2·85	3·06	2·18	1·54	2·31
1911–20	...	3·74	15·69	7·16	2·29	5·69	2·95	2·97	2·26	1·63	2·31
1921–30	...	4·43	15·49	7·06	2·37	5·48	3·06	4·02	2·74	1·79	2·49
1931–35	...	5·60	20·29	7·37	2·55	6·05	4·11	5·54	3·31	2·25	3·04
1936–40	...	7·30	29·58	8·67	2·89	7·30	5·73	9·52	4·82	2·83	4·10
1941–45	...	10·34	46·29	9·46	2·85	9·13	8·25	12·26	5·58	2·74	4·56
1946	...	7·86	25·39	6·09	2·22	5·08	5·91	5·84	3·45	2·27	3·00
1947	...	7·65	24·86	6·09	2·14	4·89	5·86	5·53	3·55	2·22	2·97
1948	...	8·91	24·61	6·04	2·13	4·88	7·06	5·56	3·70	2·18	3·02
1949	...	9·47	27·04	5·87	1·96	4·62	7·02	5·80	3·34	2·01	2·72
1950	...	9·20	30·36	5·93	1·94	4·56	7·24	6·59	3·44	2·13	2·80
1951	...	10·22	34·74	5·68	1·85	4·42	7·36	8·21	3·42	2·06	2·73
1952	...	10·28	37·65	5·97	1·91	4·65	7·67	9·46	3·58	2·11	2·84
1953	..	9·63	38·86	6·18	2·13	4·75	7·43	10·10	4·01	2·35	3·09

Table XCVII.—Accidents and violence: Death rates per million living by sex and age, 1901 to 1953

		All ages	0–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over
Males													
1901–10	...	827	1,231	329	262	447	555	677	914	1,257	1,623	1,818	2,621
1911–20	...	857	934	395	304	596	902	828	894	1,082	1,395	1,715	2,757
1921–30	...	709	683	375	243	449	584	536	658	917	1,259	1,616	2,842
1931–35	...	770	697	370	228	533	739	602	640	921	1,271	1,599	3,358
1936–40	...	968	775	420	297	651	1,121	826	825	1,046	1,475	1,835	3,887
1941–45	...	1,167	897	612	435	935	2,192	1,263	870	1,008	1,323	1,691	3,183
1946	...	622	688	328	251	414	565	453	478	582	864	1,213	2,612
1947	...	628	664	381	228	398	528	465	465	633	850	1,210	2,786
1948	...	562	585	318	179	350	458	398	406	574	844	1,136	2,320
1949	...	569	547	299	194	386	509	387	433	583	805	1,084	2,554
1949*	...	567	541	298	193	386	508	387	431	579	797	1,085	2,556
1950*	...	562	461	252	153	376	555	423	418	579	807	1,120	2,451
1951*	...	591	487	259	190	362	608	474	429	591	814	1,137	2,745
1952*	...	568	473	217	167	415	643	445	436	546	796	1,092	2,450
1953*	..	582	418	215	151	373	603	446	429	583	822	1,198	2,811
Females													
1901–10	...	329	1,059	226	81	103	111	135	198	307	423	752	2,287
1911–20	...	300	767	234	98	117	120	127	179	272	382	728	2,364
1921–30	...	283	487	182	71	117	127	126	168	268	397	716	2,516
1931–35	...	346	505	201	81	142	155	161	194	297	443	878	3,044
1936–40	...	477	570	230	137	222	233	235	281	412	595	1,116	3,707
1941–45	...	499	687	322	206	256	274	276	307	404	552	959	3,064
1946	...	326	494	149	70	83	86	116	152	225	351	661	2,725
1947	...	334	503	162	63	82	81	109	145	237	356	703	2,707
1948	...	306	434	153	63	72	76	99	137	231	347	614	2,341
1949	...	306	387	128	63	81	92	85	128	212	336	617	2,513
1949*	...	302	378	128	63	79	92	81	126	212	330	612	2,492
1950*	...	308	338	127	47	80	81	79	125	223	323	606	2,698
1951*	...	321	350	96	45	88	87	85	126	228	327	648	2,803
1952*	...	298	330	100	50	77	86	85	120	213	322	604	2,406
1953*	..	329	319	94	62	73	86	88	139	232	349	670	2,727

* According to the 6th Revision of the International Classification. Other years according to the classification in use at the time.

Table XCIX.—Motor vehicle accidents : Death rates per million living by sex and age, and Comparative Mortality Indices by sex, 1931 to 1953

		All ages	0–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over	C.M.I. (1938 =1·00)
Males													
1931–35	...	208	184	93	204	368	210	133	153	206	363	678	1·12
1936–40	...	216	159	86	176	363	209	152	171	257	411	749	1·01
1941–45	...	199	198	113	152	227	193	149	160	228	353	556	0·92
1946 ...	...	153	144	109	161	205	139	109	102	160	241	498	0·73
1947 ...	...	146	134	75	127	209	139	106	111	147	246	460	0·70
1948 ...	...	126	135	63	122	173	112	79	97	142	194	400	0·60
1949 ...	...	140	123	80	147	226	117	103	101	137	229	451	0·67
1949* ...	...	142	126	83	150	232	118	105	101	138	232	454	0·68
1950* ...	...	151	104	60	177	279	164	106	102	153	242	439	0·72
1951* ...	...	161	112	88	178	308	174	112	117	160	231	505	0·77
1952* ...	...	149	105	73	165	301	150	123	105	144	219	403	0·71
1953* ..	..	158	98	61	170	307	164	110	126	160	245	518	0·75
Females													
1931–35	...	68	106	34	49	50	31	29	49	95	181	267	1·17
1936–40	...	64	84	30	49	48	29	27	45	85	173	279	1·02
1941–45	...	56	106	42	42	40	29	26	37	61	107	172	0·86
1946 ...	...	47	72	30	36	27	21	20	27	56	100	185	0·70
1947 ...	...	47	71	26	37	23	17	22	33	54	100	177	0·69
1948 ...	...	43	79	31	25	16	14	19	21	49	101	157	0·64
1949 ...	...	41	65	32	32	30	10	16	22	44	95	151	0·60
1949* ...	...	41	66	32	32	30	10	16	22	44	95	151	0·61
1950* ...	...	46	64	25	40	30	17	19	35	48	84	200	0·67
1951* ...	...	49	58	22	47	37	19	23	35	54	101	198	0·71
1952* ...	...	42	52	21	34	31	19	18	28	43	94	168	0·62
1953* ..	..	45	56	25	36	37	16	18	33	49	87	181	0·65

* According to the 6th Revision of the International Classification (Nos. E810–E835). Other years according to the classification in use at the time.

Table C.—Motor vehicle accidents (E810-E835): Death rates per million living by sex and age in standard regions and urban/rural aggregates, 1953

(based on deaths assigned according to area of normal residence).

	Males					Females				
	0–	15–	45–	65 and over	All ages	0–	15–	45–	65 and over	All ages
ENGLAND AND WALES	88	168	140	331	158	47	23	40	120	45
Conurbations (excluding Greater London)	104	138	135	335	146	55	24	37	150	49
Greater London	57	118	93	371	120	30	21	42	148	44
<i>Areas outside conurbations:</i>										
Urban areas with populations of 100,000 and over	86	149	120	362	146	45	20	35	120	42
Urban areas with populations of 50,000 and under 100,000	89	149	145	297	148	66	15	47	107	46
Urban areas with populations under 50,000	82	166	143	267	150	43	21	26	97	37
Rural Districts	104	260	196	361	220	55	33	59	103	54
Regional summary :										
Northern	138	152	147	383	168	54	15	28	82	35
East and West Ridings ..	95	171	159	346	166	51	19	40	96	41
North Western	120	146	137	284	150	66	24	41	159	55
North Midland	114	192	160	234	169	57	18	44	123	46
Midland	77	177	154	400	166	50	28	41	142	49
Eastern	65	209	172	335	179	23	28	59	82	42
South East (excluding Greater London) ..	65	160	152	359	159	55	23	30	116	46
Southern	71	222	168	361	189	48	34	26	85	42
South Western	82	192	145	245	161	28	28	42	101	43
Wales (including Monmouthshire	82	220	114	315	170	66	22	36	113	46

Table CI.—Deaths of pedestrians, pedal cyclists, motor cyclists, motor vehicle occupants and others in motor vehicle traffic accidents, motor vehicle non-traffic accidents and other road vehicle accidents, by sex, 1936-40, 1941-45 and 1946 to 1953

	1936-40 (Annual average)		1941-45 (Annual average)		1946-49 (Annual average)		1949		1950		1951		1952		1953	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Pedestrians :																
Motor vehicle traffic accidents ..	2,148	1,010	2,073	898	1,295	706	1,214	674	1,140	726	1,302	725	1,099	663	1,182	674
Motor vehicle non-traffic accidents ..							13	2	32	6	43	10	54	8	32	10
Other road vehicle accidents ..	194	79	166	70	79	47	67	51	76	51	59	43	73	31	48	26
Pedal cyclists :																
Motor vehicles traffic accidents ..	777	131	557	140	464	86	496	78	475	80	473	80	443	74	461	73
Motor vehicle non-traffic accidents ..									1							
Other road vehicle accidents ..	249	44	230	51	159	29	157	30	168	31	160	18	125	31	113	30
Motor cyclists :																
Motor vehicle traffic accidents ..	1,018	77	651	27	659	48	733	56	979	79	1,019	94	1,002	78	1,040	95
Motor vehicle non-traffic accidents ..							6		7		3		10	1	10	1
Motor vehicle occupants and others :																
Motor vehicle traffic accidents ..	631	191	762	167	549	155	498	118	505	150	499	200	469	143	542	179
Motor vehicle non-traffic accidents ..							50	1	48	2	57	5	70	3	75	1
Other road vehicle accidents ..	36	3	47	11	26	6	32	7	50	13	19	7	31	14	20	10

Table CII.—Air transport accidents : Death rates per million living by sex and age 1931 to 1953

			All ages	0—	10—	15—	20—	25—	35—	45—	55—	65—	75 and over
Males													
1931–35	..	..	2·84	0·07	0·23	1·88	12·59	7·42	1·88	0·17	0·22	0·40	—
1936–40	..	..	8·47	0·21	0·26	10·92	45·47	15·95	5·73	1·52	0·51	0·17	1·02
1941–45	..	..	0·95	—	—	1·02	2·15	2·78	1·06	0·49	0·10	0·16	—
1946	..	..	0·73	—	—	1·32	0·62	2·14	1·20	0·39	—	—	—
1947	..	..	6·96	0·31	—	3·40	37·01	19·30	3·59	1·15	1·49	—	—
1948	..	..	9·91	0·30	0·71	6·17	38·12	29·88	6·82	4·85	1·48	0·73	—
1949	..	..	8·99	0·59	—	6·27	34·02	26·09	8·55	3·64	1·48	—	—
1950	..	..	10·86	—	—	12·63	37·01	31·05	8·87	7·09	3·43	1·45	—
1951	..	..	12·97	0·28	—	8·25	50·11	47·65	7·91	2·78	1·97	1·46	—
1952	..	..	13·78	—	3·50	29·30	67·00	38·00	8·36	1·36	0·98	—	1·61
1953	..	..	8·96	—	—	9·71	61·69	22·18	4·47	1·99	—	—	—
Females													
1931–35	..	..	0·18	—	—	0·13	0·34	0·47	0·33	0·08	—	0·16	—
1936–40	..	..	0·27	0·21	—	0·59	0·37	0·51	0·51	—	0·09	—	—
1941–45	..	..	0·15	—	—	0·13	0·70	0·30	0·18	—	0·08	—	—
1946	..	..	0·05	—	—	—	—	0·30	—	—	—	—	—
1947	..	..	0·40	0·32	—	0·69	0·64	0·30	0·29	1·01	—	0·57	—
1948	..	..	0·85	—	0·73	1·41	2·61	1·21	1·46	1·00	—	—	—
1949	..	..	0·84	0·61	2·16	2·13	0·66	—	0·88	1·97	0·40	—	—
1950	..	..	0·44	—	—	—	1·33	1·55	0·29	0·65	—	—	—
1951	..	..	1·01	—	—	—	3·36	2·17	0·89	0·64	1·18	0·53	2·05
1952	..	..	0·88	0·29	—	3·65	4·08	1·24	—	0·95	0·39	—	—
1953	..	..	0·09	—	—	—	—	0·31	—	0·31	—	—	—

Table CIII.—Suicide : Death rates per million living by sex and age, and Comparative Mortality Indices by sex, 1901 to 1953

		All ages	0-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over	C.M.I.* (1938 =1·00)
Males													
1901-10 ...	...	157	1	4	36	91	152	252	397	523	508	382	1·17
1911-20 ...	...	130	—	3	32	69	122	196	278	389	405	350	0·90
1921-30 ...	...	166	—	2	31	78	111	211	346	487	513	438	1·04
1931-35 ...	...	196	0	2	40	96	140	210	379	542	533	483	1·14
1936-40 ...	...	172	—	2	32	89	118	177	284	462	477	466	0·95
1941-45 ...	...	126	—	3	43	72	100	128	185	271	347	382	0·66
1946 ...	...	138	—	5	31	49	94	154	200	300	391	465	0·72
1947 ...	...	136	—	3	35	59	94	123	209	314	382	480	0·71
1948 ...	...	144	—	2	29	73	86	134	219	338	469	388	0·76
1949 ...	...	144	—	1	32	60	80	134	236	334	422	490	0·76
1950 ...	...	136	—	1	30	60	70	122	222	323	416	421	0·71
1951 ...	...	135	—	6	24	53	78	120	213	303	410	477	0·70
1952 ...	...	132	—	1	34	55	78	120	198	320	389	413	0·69
1953 ..	..	142	—	1	28	67	89	126	222	325	411	480	0·74
Females													
1901-10 ...	...	49	—	3	34	45	56	81	109	108	88	49	0·75
1911-20 ...	...	47	—	2	30	41	50	74	100	102	81	52	0·69
1921-30 ...	...	63	—	1	25	43	57	87	135	143	108	63	0·84
1931-35 ...	...	80	—	0	23	49	77	108	154	166	134	84	1·01
1936-40 ...	...	79	—	1	14	38	65	99	155	169	142	89	0·98
1941-45 ...	...	62	—	1	9	22	52	77	108	128	117	73	0·74
1946 ...	...	74	—	1	15	26	53	87	135	157	146	92	0·89
1947 ...	...	76	—	—	10	28	51	80	134	160	166	114	0·90
1948 ...	...	78	—	—	11	20	50	80	141	183	173	98	0·93
1949 ...	...	75	—	1	15	26	45	77	127	165	165	138	0·89
1950 ...	...	70	—	1	10	23	34	75	124	157	153	115	0·82
1951 ...	...	72	—	—	9	20	38	66	135	160	167	105	0·84
1952 ...	...	68	—	1	11	12	35	66	118	154	164	97	0·79
1953 ..	..	76	—	3	10	22	39	79	127	167	171	127	0·89

* C.M.I.'s. are based on civilian deaths and civilian populations for the years 1940-1949 inclusive.

Table CIV.—Suicide: Proportions per 1,000 deaths according to external agent, by sex and age in the period, 1950-53

Agent	Males					Females					All ages
	15-	35-	55-	75 and over	All ages	15-	35-	55-	75 and over	All ages	
Coal gas poisoning ..	361	409	376	399	388	486	518	517	541	515	
Other poisoning	135	138	101	62	115	234	218	190	163	203	
Hanging or strangulation ..	217	171	195	180	188	59	77	83	72	78	
Drowning	45	81	130	142	103	91	117	148	140	130	
Firearms or explosives ..	99	75	53	52	66	22	7	1	—	6	
Cutting and piercing instru- ments	26	45	80	93	62	16	15	20	29	18	
Jumping from high place ..	26	22	25	46	26	33	26	25	41	27	
Other agents	91	59	40	26	52	59	22	16	14	23	
Total	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	

Table CV.—Suicide : Mean annual death rates per million living in Standard Regions, and regional rates expressed as percentages of England and Wales, 1949-53

	Males					Females				
	15-	35-	55-	65 and over	All ages over 15	15-	35-	55-	65 and over	All ages over 15
England and Wales ..	63	168	321	424	181	28	98	160	148	91
Mean annual death rates										
Regional summary:										
Northern	67	164	361	412	182	27	85	131	105	73
East and West Ridings ..	65	172	331	435	187	23	100	162	154	91
North Western	69	170	343	465	193	24	96	167	184	96
North Midland	58	165	384	456	189	27	97	170	145	90
Midland	58	167	314	499	179	31	100	196	174	98
Eastern	68	176	305	389	182	32	97	166	136	92
London and South Eastern	68	169	294	424	180	32	104	160	149	95
Southern	54	163	304	418	171	27	106	157	150	95
South Western	61	188	308	368	182	23	106	143	136	90
Wales (including Monmouthshire)	56	127	274	311	145	26	77	132	85	68
England and Wales ..	100	100	100	100	100	100	100	100	100	100
Percentages										
Regional summary:										
Northern	106	98	112	97	101	96	87	82	71	80
East and West Ridings ..	103	102	103	103	103	82	102	101	104	100
North Western	110	101	107	110	107	86	98	104	124	105
North Midland	92	98	120	108	104	96	99	106	98	99
Midland	92	99	98	118	99	111	102	123	118	108
Eastern	108	105	95	92	101	114	99	104	92	101
London and South Eastern	108	101	92	100	99	114	106	100	101	104
Southern	86	97	95	99	94	96	108	98	101	104
South Western	97	112	96	87	101	82	108	89	92	99
Wales (including Monmouthshire) ..	89	76	85	73	80	93	79	83	57	75

Table CVI.—Accidental falls : Death rates per million living by sex and age, and Comparative Mortality Indices by sex, 1901 to 1953

			All ages	0–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over	C.M.I.† (1938 =1·00)
Males														
1901–10	...	...	84	45	25	23	24	39	69	119	209	420	1,253	1·06
1911–20	...	...	107	38	30	39	36	56	93	155	254	454	1,373	1·29
1921–30	...	...	85	25	18	31	31	37	56	93	161	352	1,306	0·92
1931–35	...	...	93	25	18	31	33	37	47	79	146	338	1,609	0·92
1936–40	...	...	120	31	24	34	40	51	58	95	177	414	1,910	1·05
1941–45	...	...	109	35	26	40	30	41	58	87	157	337	1,448	0·93
1946	...	...	86	27	21	25	26	30	43	57	107	245	1,203	0·73
1947	...	...	97	31	26	33	42	36	50	68	108	254	1,352	0·80
1948	...	...	80	27	22	22	27	37	41	49	85	211	1,122	0·66
1949	...	...	78	20	18	28	31	33	38	57	68	185	1,162	0·63
1949*	...	...	79	25	18	27	28	32	35	55	71	191	1,174	0·66
1950*	...	...	74	14	18	19	25	29	34	50	71	183	1,139	0·61
1951*	...	...	86	17	17	17	34	35	40	51	85	241	1,275	0·71
1952*	...	...	79	16	17	23	30	30	30	47	78	221	1,169	0·64
1953*	..	..	84	14	10	22	29	30	33	52	80	246	1,254	0·68
Females														
1901–10	...	...	68	27	6	4	4	10	26	64	132	389	1,657	0·88
1911–20	...	...	69	20	6	5	5	8	20	50	108	356	1,752	0·83
1921–30	...	...	73	13	4	4	4	5	10	31	85	318	1,845	0·75
1931–35	...	...	100	14	5	3	3	6	8	30	92	388	2,283	0·90
1936–40	...	...	136	18	6	4	5	6	12	34	123	476	2,714	1·11
1941–45	...	...	118	17	8	5	6	6	11	26	81	346	2,135	0·85
1946	...	...	110	15	4	3	5	6	6	11	59	260	2,037	0·76
1947	...	...	111	11	7	9	4	4	5	15	58	286	1,947	0·75
1948	...	...	100	11	4	4	4	3	4	18	51	231	1,726	0·66
1949	...	...	105	10	6	3	2	2	4	13	50	232	1,840	0·69
1949*	...	...	105	12	6	4	1	2	5	15	51	230	1,822	0·69
1950*	...	...	113	8	2	2	1	3	5	14	45	230	1,994	0·73
1951*	...	...	117	9	—	2	5	3	3	12	46	240	2,034	0·75
1952*	...	...	105	9	2	2	5	2	5	11	44	218	1,743	0·66
1953*	..	..	123	7	4	2	2	4	5	15	50	241	2,018	0·75

* According to the 6th Revision of the International Classification (Nos. E900–904). Other years according to the classification in use at the time.

† C.M.I's. are based on civilian deaths and civilian populations for the years 1940–1949 inclusive.

Table CVII.—Accidental falls (E900-E904): Death rates per million living by sex and age in conurbations and urban/rural aggregates, 1953

				All ages	0—	5—	15—	25—	35—	45—	55—	65—	75 and over
ENGLAND AND WALES ..				{ M. 84	18	10	26	30	33	52	80	246	1,254
				{ F. 123	13	3	2	4	5	15	50	241	2,018
Conurbations:													
Tyneside	..	..	..	{ M. 102	28	31	40	48	53	53	75	269	1,700
				{ F. 92	—	—	—	—	—	—	21	212	2,133
West Yorkshire	..	..	..	{ M. 120	31	—	36	61	59	65	107	333	1,818
				{ F. 168	—	9	—	8	8	44	64	280	2,947
South East Lancashire	..	..	..	{ M. 100	11	29	65	35	51	82	119	411	929
				{ F. 108	33	—	—	—	16	11	52	196	2,083
Merseyside	..	..	..	{ M. 100	32	9	37	31	64	92	136	351	1,400
				{ F. 115	17	—	10	9	—	31	51	250	2,346
West Midlands	..	..	..	{ M. 77	11	5	47	39	6	53	41	339	1,440
				{ F. 109	11	—	—	6	12	6	67	378	2,024
Greater London	..	..	..	{ M. 74	26	10	30	25	26	57	76	197	1,163
				{ F. 91	24	4	—	3	6	13	44	216	1,439
Areas outside conurbations:													
Urban areas with populations of 100,000 and over	..	..	..	{ M. 89	21	12	23	21	34	59	79	271	1,468
				{ F. 119	13	7	5	2	2	12	57	236	2,054
Urban areas with populations of 50,000 and under 100,000	..	..	..	{ M. 90	8	—	25	38	26	44	88	283	1,408
				{ F. 157	8	4	—	8	—	20	45	295	2,432
Urban areas with populations under 50,000	..	..	..	{ M. 87	19	8	9	31	37	46	81	256	1,248
				{ F. 145	11	1	5	3	4	16	56	270	2,231
Rural Districts..	..	..	..	{ M. 72	12	12	24	28	30	33	59	155	1,081
				{ F. 122	3	3	—	4	5	12	38	189	2,020

Table CVIII.—Accidental falls (E900-E904): Annual average of deaths and percentage distribution according to place of occurrence, 1949-53*

			Home and resident institution	Farm, mine or industrial premises	Place for recreation or sport	Other	Total
From one level to another	{	Deaths	1,217	298	16	234	1,765
		Per cent of total	69	17	1	13	100
On the same level ..	{	Deaths	1,253	22	8	330	1,613
		Per cent of total	78	1	0	21	100
Unspecified ..	{	Deaths	614	9	1	260	884
		Per cent of total	70	1	0	29	100

* Excluding non-civilians for 1949 only.

MISCELLANEOUS

Infectious Diseases—deaths occurring a long period after onset

The rules for classification, embodied in the International Statistical Classification of Diseases, Injuries and Causes of Death, 1948, state that “when an acute infective disease classified in categories 040-043, 050, 055, 056, 058, 084-087, 100-108 is certified as the underlying cause of some other condition and the interval between its onset and death is stated to be one year or more, it is recommended that such deaths should be appropriately identified in tabulation.” This practice has been followed in England and Wales, and the deaths in question in 1953 are separately tabulated below. Four infectious diseases were involved: Paratyphoid fever (1 death), Scarlet fever (23 deaths), Diphtheria (3 deaths) and Measles (3 deaths).

Age at death	Interval between onset of infectious disease and death (years)					
	1-4	5-9	10-19	20-29	30-39	40 and over
65 and over ..	1	Paratyphoid Fever (041)			—	—
		—	—	—		
15-44	1	Scarlet Fever (050)			—	—
45-64	—	—	5	1	—	—
65 and over ..	—	—	—	2	5	3
		—	—	—	—	6
45-64	1	Diphtheria (055)			1	—
		—	1	—		
5-14	2	Measles (085)			—	—
65 and over ..	1	—	—	—	—	—
		—	—	—	—	—

Details of age, sex, other conditions on death certificate, and interval (in years) since onset of the infectious disease, are:—

Age	Sex	Associated conditions	Interval (in years) since onset of infectious disease
Paratyphoid fever			
85	F	Cerebral degeneration ; cerebral thrombosis	2
Scarlet fever			
16	F	Uræmia ; chronic nephritis with hypertension	4
16	F	Hypertension ; chronic nephritis	10
18	F	Cardiac failure ; chronic nephritis	12
20	F	Cardiac failure ; mitral stenosis and pulmonary infarcts ..	15
28	F	Congestive cardiac failure ; auricular fibrillation ; mitral disease	19
37	F	Hæmoptysis ; mitral stenosis ; pulmonary fibrosis ..	21
38	M	Mitral stenosis ; aortic regurgitation	19
45	M	Congestive cardiac failure ; valvular heart disease ..	(in childhood)
45	F	Coronary occlusion ; mitral stenosis	(in childhood)
46	F	Mitral regurgitation	35
49	F	Myocardial failure ; mitral stenosis and regurgitation ..	(in childhood)
50	F	Myocardial degeneration ; mitral incompetence	41
51	F	Auricular fibrillation	20
52	F	Coronary thrombosis ; chronic myocarditis	20
55	M	Chronic nephritis	30
57	M	Aortic and mitral stenosis ; chronic nephritis	30
61	F	Coronary embolism ; auricular fibrillation	40
66	F	Uræmia ; nephritis, myocarditis ; mitral stenosis ..	(when a girl)
67	F	Myocardial degeneration ; valvular disease of heart ; acute endocarditis	49
76	F	Myocardial failure ; mitral stenosis	(in childhood)
77	M	Congestive cardiac failure ; mitral incompetence	50
79	F	Endocarditis	(in childhood)
80	M	Aortic incompetence	(in childhood)
Diphtheria			
55	M	Congestive cardiac failure ; myocarditis	2
55	F	Myocardial failure ; heart block	18
62	F	Chronic parenchymatous nephritis	30
Measles			
6	M	Encephalitis	2½
8	F	Status epilepticus ; encephalitis	3
71	M	Myocardial degeneration	2

Deaths following vaccination or other prophylactic inoculation

This section includes deaths classified to E940-E942, vaccinia, post-vaccinal encephalitis and other complications of smallpox vaccination, and to E943, E944, post-immunization jaundice and hepatitis and other complications of prophylactic inoculation. Deaths classified to some other condition as the underlying cause, but with vaccination either mentioned on the certificate or ascertained by enquiry to have been associated with the death, are also mentioned here.

In 1953, five deaths were assigned to complications of vaccination against smallpox, viz:—

1. Male aged 2 months, certified as encephalitis. Further enquiry gave vaccinia as the probable cause of encephalitis.
2. Male aged 5 months, certified as post-vaccinal encephalitis.
3. Male aged 42 years, certified as encephalitis, which later enquiry showed to be post-vaccinal.
4. Female aged 5 months, certified as bronchopneumonia following generalised vaccinia and eczema.
5. Female aged 11 months, certified as encephalitis following vaccination.

There were three deaths assigned to other complications of prophylactic inoculation:—

1. Male aged 18 years, certified as extensive thrombosis of cerebral veins and dural venous sinuses following multiple inoculations.
2. Male aged 54 years, certified as acute ventricular failure due to acute allergic reaction following upon an inoculation with a vaccine properly administered.
3. Female aged 2 years, certified as anaphylactic shock following an injection of globulin preparation as a diphtheria antitoxin with right peritonsillar abscess as an associated condition.

There were two deaths in connection with which vaccination was mentioned but which were assigned to other causes:—

1. Male aged 3 months, certified as unexplained convulsions and œdema of the brain following but almost certainly not due to vaccination.
2. Female aged 7 months, certified as thrombosis of superior longitudinal sinus and cerebral veins. Later enquiry showed that vaccination might have been a factor.

Medical Certification of Cause of Death

Mortality Analysis by Type of Certifier

One of the many factors influencing comparability of mortality statistics is the basis of diagnosis of cause of death. It is desirable to know, for example, what proportions of deaths from different causes are certified by doctors and by coroners; what proportions in hospital, where diagnostic facilities exist which may not be available elsewhere; and what proportions are confirmed by post mortem examination. The World Health Organization Centre for the Classification of Diseases, in collaboration with the General Register Office, has prepared the present analysis of one quarter's deaths in England and Wales.

The analysis is of 114,642 deaths registered during the June quarter of 1953. Table CIX (page 222) shows 60 groups of causes of death for all ages analysed by sex, and whether the death was certified by a doctor or by a coroner; if by a doctor, whether it occurred in hospital or elsewhere; and if by a coroner, whether or not an inquest was held. For each of these divisions, it also shows whether or not a post mortem examination was made. It shows that there was a very great variation between causes in the proportions confirmed by post mortem; from 1 per cent for senility (I.S.C. No. 794: 1,590 deaths), 5 per cent for non-rheumatic heart diseases (421, 422, 430-434: 18,074 deaths), 6 per cent for malignant neoplasm of breast (170: 1,964) and 9 per cent for cerebral vascular lesions (330-334: 16,111) to 70 per cent for pneumonia of newborn (763: 207), 73 per cent for meningococcal infections (057: 66) and 74 per cent for otitis media and mastoiditis (391-393: 84). The average for all causes was 20 per cent and for all non-violent causes (001-795) 18 per cent. For all malignant neoplasms (140-205: 21,442) it was 15 per cent.

Of the deaths certified by doctors, the proportions occurring in hospital varied from 19 per cent for influenza (I.S.C. Nos. 480-483: 428 deaths certified by doctors), 26 per cent for bronchitis (500-502 : 4,355) and 28 per cent for senility (794 : 1,572) to 95 per cent for pneumonia of newborn (763 : 180) and acute poliomyelitis (080 : 43), 98 per cent for appendicitis (550-553 : 181), and 100 per cent for tuberculosis of the meninges and central nervous system (010 : 97). The average for all non-violent causes (001-795 : 98,992) was 43 per cent.

Confirmation by post mortem was rare in deaths certified by doctors outside hospital—0.3 per cent compared with 32 per cent for deaths certified by doctors in hospital.

Table CIX.—Percentage distribution according to method of certification.
Deaths registered in the June quarter, 1953, England and Wales

International Classification No.	Cause of death	Doctor				Coroner				Total deaths (= 100 per cent)
		Hospital		Else- where		Inquest		No Inquest		
		P.M.	NO P.M.	P.M.	NO P.M.	P.M.	NO P.M.	P.M.	NO P.M.	
PERSONS										
001-008	Tuberculosis, respiratory	9	32	—	46	4	—	8	—	1,828
010	Tuberculosis of meninges and central nervous system	30	67	—	—	1	—	2	—	100
011-019	Tuberculosis, other	28	37	—	22	1	1	10	—	164
020-029	Syphilitic disease	19	23	—	25	2	—	30	—	373
056	Whooping cough	21	58	—	19	—	—	2	—	57
057	Meningococcal infections	42	21	3	5	2	—	26	2	66
080	Acute poliomyelitis	16	65	—	4	2	—	14	—	51
085	Measles	11	49	—	30	—	—	10	—	80
092	Infectious hepatitis	44	27	—	14	5	—	11	—	66
Rem. 001-138 ..	Other infective and parasitic diseases ..	24	35	—	20	8	3	9	—	222
140-148	Malignant neoplasm, mouth & pharynx	7	37	—	53	—	—	3	1	496
150	„ „ œsophagus	14	34	—	48	—	—	3	—	532
151	„ „ stomach	8	29	—	60	—	—	2	—	3,478
152-154	„ „ intestine & rectum	9	36	—	52	—	—	3	—	3 902
161	„ „ larynx	10	29	—	55	—	—	6	—	222
162, 163	„ „ lung, bronchus ..	15	28	—	52	1	—	4	—	3,584
170	„ „ breast	4	29	—	66	—	—	2	—	1,964
171	„ „ cervix uteri	8	37	—	53	—	—	2	—	637
172-174	„ „ uterus unspecified	8	27	—	61	—	—	4	—	376
200	Lymphosarcoma, reticulosarcoma ..	31	30	1	35	1	—	3	—	176
201	Hodgkin's disease	20	32	—	42	1	—	4	1	204
204	Leukæmia, aleukæmia	23	41	—	30	1	—	4	—	495
Rem. 140-205 ..	Other malignant and lymphatic neoplasms	15	33	—	48	1	—	3	—	5,385
252	Thyrototoxicosis	13	23	—	53	2	1	8	—	92
260	Diabetes	14	36	—	42	2	1	5	1	767
330-334	Vascular lesions affecting central nervous system	4	32	—	58	—	—	5	—	16,111
391-393	Otitis media and mastoiditis	50	25	—	1	1	—	23	—	84
400-402	Rheumatic fever	40	30	—	20	1	—	9	—	82
410-416	Chronic rheumatic heart disease	13	26	—	50	1	—	9	—	2,069
420	Coronary disease, angina	6	15	—	52	2	—	23	2	14,477
421, 422, 430-434	Other heart disease	2	26	—	67	—	1	3	—	18,076
440-443	Hypertension with heart disease	5	34	—	55	—	—	5	—	2,646
444-447	Hypertension without mention of heart	8	32	—	46	1	1	12	1	1,920
450-456, 460-468	Other circulatory disease	10	34	—	45	1	1	10	—	3,504
480-483	Influenza	5	13	1	73	1	—	8	—	470
490-493	Pneumonia	15	43	—	27	2	—	13	—	3,791
500-502	Bronchitis	4	20	—	68	1	—	6	—	4,702
470-475, 510-527	Other diseases of respiratory system ..	15	22	1	35	10	1	16	1	964
540, 541	Ulcer of stomach and duodenum	35	37	—	11	3	—	14	—	1,182
550-553	Appendicitis	33	51	—	1	5	—	9	—	211
560, 561, 570 ..	Intestinal obstruction and hernia	28	43	—	8	2	1	18	—	721
543, 571, 572, 764	Gastritis, enteritis and diarrhœa	28	32	—	29	2	—	10	—	556
581	Cirrhosis of liver	31	32	—	30	2	—	5	—	273
584, 585	Cholelithiasis, cholecystitis	30	35	—	26	2	—	8	—	394
590-594	Nephritis and nephrosis	15	32	—	48	1	—	4	—	1,330
610	Hyperplasia of prostate	12	64	—	19	1	—	4	—	952
643-649, 660, 670-678, 680, 683, 687-689	Diseases of pregnancy, childbirth and puerperium	19	19	—	5	12	—	46	—	58
750-759	Congenital malformations	34	37	1	16	1	—	11	—	1,051
760, 761	Birth injury	51	32	1	9	1	—	6	—	486
762	Postnatal asphyxia and atelectasis ..	45	39	—	6	1	—	7	1	629
763	Pneumonia of newborn	57	26	—	4	1	—	12	—	207
770	Hæmolytic disease of newborn	51	32	1	6	—	1	9	—	110
774, 776	Immaturity (without other disease peculiar to early infancy)	9	77	—	12	—	—	1	1	936
794	Senility without psychosis	—	27	—	71	—	—	1	—	1,590
780-789, 790-793, 795	Ill-defined and unknown cause	4	23	1	9	30	1	13	19	66
Rem. 210-795 ..	Other defined and ill-defined diseases ..	20	35	—	34	3	1	7	—	5,094
001-795	All non-violent causes	9	29	—	51	1	—	8	1	110,059
E810-835	Motor vehicle accidents	—	—	—	—	55	44	—	—	995
E800-802, 840-962	All other accidents	—	1	—	1	53	42	1	—	2,278
E963, 970-979 ..	Suicide	—	—	—	—	61	38	—	—	1,259
E964, 965, 980-999	Homicide and operations of war	—	2	—	4	65	24	6	—	51
E800-999	All accidental and violent causes	—	1	—	1	56	41	1	—	4,583
	All causes	9	28	—	49	3	2	8	1	144,642

Table CIX.—*continued.*

International Classification No.	Cause of death	Doctor				Coroner				Total deaths (= 100 per cent)
		Hospital		Else- where		Inquest		No Inquest		
		P.M.	NO P.M.	P.M.	NO P.M.	P.M.	NO P.M.	P.M.	NO P.M.	
MALES										
001-008	Tuberculosis, respiratory	8	32	—	44	5	—	10	—	1,258
010	Tuberculosis of meninges and central nervous system	—	—	—	—	—	—	—	—	49*
011-019	Tuberculosis, other	31	33	—	20	2	2	11	—	100
020-029	Syphilitic disease	18	25	—	27	2	—	27	—	245
056	Whooping cough.. ..	—	—	—	—	—	—	—	—	22*
057	Meningococcal infections	—	—	—	—	—	—	—	—	38*
080	Acute poliomyelitis	—	—	—	—	—	—	—	—	35*
085	Measles	—	—	—	—	—	—	—	—	41*
092	Infectious hepatitis	—	—	—	—	—	—	—	—	35*
Rem. of 001-138..	Other infective and parasitic diseases ..	20	33	1	18	10	5	13	—	125
140-148	Malignant neoplasm, mouth & pharynx ..	6	39	—	52	—	—	2	1	363
150	„ „ œsophagus	14	34	—	47	—	—	4	—	325
151	„ „ stomach	10	30	—	56	1	—	3	—	1,983
152-154	„ „ intestine & rectum	9	38	—	49	—	—	4	—	1,905
161	„ „ larynx	10	29	1	53	—	—	7	—	181
162-163	„ „ lung, bronchus	14	27	—	53	1	—	5	—	3,065
170	„ „ breast	—	—	—	—	—	—	—	—	27*
200	Lymphosarcoma, reticulosarcoma	32	28	—	34	1	—	5	—	103
201	Hodgkin's disease	19	34	—	39	2	1	6	—	123
204	Leukæmia, aleukæmia	21	40	—	32	1	—	6	—	247
Rem. 140-205 ..	Other malignant and lymphatic neoplasms	16	32	—	47	1	—	4	—	2,955
252	Thyrototoxicosis	—	—	—	—	—	—	—	—	18*
260	Diabetes	12	41	—	39	2	—	5	1	257
330-334	Vascular lesions affecting central nervous system	4	33	—	57	1	—	5	—	6,840
391-393	Otitis media and mastoiditis	48	28	—	2	2	—	21	—	58
400-402	Rheumatic fever	—	—	—	—	—	—	—	—	29*
410-416	Chronic rheumatic heart disease	13	24	—	48	1	—	12	—	815
420	Coronary disease, angina	5	14	—	49	2	—	26	3	9,189
421, 422, 430-434	Other heart disease	3	26	—	65	1	—	4	—	7,628
440-443	Hypertension with heart disease	6	36	—	51	—	—	5	—	1,249
444-447	Hypertension without mention of heart	9	34	—	42	1	—	12	1	950
450-456, 460-468	Other circulatory disease	10	35	—	45	1	—	9	—	1,648
480-483	Influenza	5	10	—	74	1	—	10	—	220
490-493	Pneumonia	17	40	—	24	2	—	16	—	1,987
500-502	Bronchitis	4	22	—	67	2	—	5	—	3,167
470-475, 510-527	Other diseases of respiratory system ..	15	20	1	31	13	1	19	1	666
540-541	Ulcer of stomach and duodenum	37	37	—	9	3	—	13	—	873
550-553	Appendicitis	32	50	—	2	6	1	9	—	127
560, 561, 570 ..	Intestinal obstruction and hernia	32	39	—	7	3	—	19	—	339
543, 571, 572, 764	Gastritis, enteritis and diarrhœa	33	32	—	21	—	—	10	—	253
581	Cirrhosis of liver	29	31	—	33	2	1	4	—	147
584, 585	Cholelithiasis, cholecystitis	36	33	—	21	2	1	8	—	123
590-594	Nephritis and nephrosis	15	34	—	44	1	—	5	—	708
610	Hyperplasia of prostate	12	64	—	19	1	—	4	—	952
750-759	Congenital malformations	39	37	1	10	1	—	12	—	542
760,761	Birth injury	55	31	1	8	1	—	4	—	301
762	Postnatal asphyxia and atelectasis	49	37	—	5	1	1	7	1	372
763	Pneumonia of newborn	58	24	1	4	1	1	11	—	134
770	Hæmolytic disease of newborn	59	27	2	4	—	—	8	—	51
774,776	Immaturity (without other disease peculiar to early infancy)	8	76	—	13	—	—	1	2	520
794	Senility without psychosis	—	29	—	70	—	—	1	1	576
780-789,790-793,795	Ill-defined and unknown cause	—	—	—	—	—	—	—	—	34*
Rem. 210-795 ..	Other defined and ill-defined diseases ..	20	36	—	33	3	1	7	—	2,228
001-795	All non-violent causes	10	29	—	48	2	—	10	1	56,226
E810-835	Motor vehicle accidents	—	—	—	—	56	44	—	—	782
E800-802, 840-962	All other accidents	1	1	—	1	55	41	1	—	1,282
E963, 970-979 ..	Suicide	—	—	—	—	58	41	—	—	791
E964, 965, 980-999	Homicide and operations of war	—	—	—	—	—	—	—	—	35*
E800-999	All accidental and violent causes	—	1	—	—	56	41	1	—	2,890
	All causes	10	28	—	46	4	2	9	1	59,116

* Percentages based on less than 50 deaths are not shown.

Table CIX.—continued.

International Classification No.	Cause of death	Doctor				Coroner				Total deaths (= 100 per cent)	
		Hospital		Else- where		Inquest		No Inquest			
		P.M.	NO P.M.	P.M.	NO P.M.	P.M.	NO P.M.	P.M.	NO P.M.		
FEMALES											
001-008	Tuberculosis, respiratory	12	33	—	49	2	—	4	1	570	
010	Tuberculosis of meninges and central nervous system	27	69	—	—	—	—	4	—	51	
011-019	Tuberculosis, other	23	42	—	25	—	—	9	—	64	
020-029	Syphilitic disease	21	19	—	23	2	1	34	—	128	
056	Whooping cough.. ..	—	—	—	—	—	—	—	—	35*	
057	Meningococcal infections	—	—	—	—	—	—	—	—	28*	
080	Acute poliomyelitis	—	—	—	—	—	—	—	—	16*	
085	Measles	—	—	—	—	—	—	—	—	39*	
092	Infectious hepatitis	—	—	—	—	—	—	—	—	31*	
Rem. 001-138 ..	Other infective and parasitic diseases ..	29	37	—	23	5	—	5	—	97	
140-148	Malignant neoplasm, mouth & pharynx ..	8	31	—	57	—	—	3	1	133	
150	„ „ œsophagus	14	32	—	51	—	—	2	—	207	
151	„ „ stomach	6	26	—	66	—	—	2	—	1,495	
152-154	„ „ intestine & rectum	8	34	—	55	—	—	2	—	1,997	
161	„ „ larynx	—	—	—	—	—	—	—	—	41*	
162, 163	„ „ lung, bronchus	18	31	—	46	—	—	4	—	519	
170	„ „ breast	4	29	—	65	—	—	2	—	1,937	
171	„ „ cervix uteri	8	37	—	53	—	—	2	—	637	
172-174	„ „ uterus unspecified	8	27	—	61	—	—	4	—	376	
200	Lymphosarcoma, reticulosarcoma	29	32	1	37	—	—	1	—	73	
201	Hodgkin's disease	21	30	—	47	—	—	2	—	81	
204	Leukæmia, aleukæmia	26	41	—	29	—	—	3	—	248	
Rem. 140-205 ..	Other malignant and lymphatic neoplasms	14	34	—	49	—	—	3	—	2,430	
252	Thyrototoxicosis	9	23	—	58	3	—	7	—	74	
260	Diabetes	15	33	—	43	2	1	5	1	510	
330-334	Vascular lesions affecting central nervous system	4	31	—	59	—	—	5	—	9,271	
391-393	Otitis media and mastoiditis	—	—	—	—	—	—	—	—	26*	
400-402	Rheumatic fever	38	32	—	21	—	—	9	—	53	
410-416	Chronic rheumatic heart disease	13	27	—	51	1	—	7	—	1,254	
420	Coronary disease, angina	6	16	—	57	1	—	17	2	5,288	
421, 422, 430-434	Other heart disease	2	26	—	68	—	1	3	—	10,448	
440-443	Hypertension with heart disease	4	31	—	59	1	1	5	—	1,397	
444-447	Hypertension without mention of heart ..	7	29	—	50	1	1	12	1	970	
450-456, 460-468	Other circulatory disease	10	32	—	45	1	1	11	—	1,856	
480-483	Influenza	4	16	1	72	1	—	6	—	250	
490-493	Pneumonia	13	46	—	29	1	—	11	—	1,804	
500-502	Bronchitis	4	18	—	71	—	—	6	—	1,535	
470-475, 510-527	Other diseases of respiratory system ..	15	28	—	42	4	—	10	—	298	
540, 541	Ulcer of stomach and duodenum	30	37	—	17	1	—	15	—	309	
550-553	Appendicitis	35	54	—	—	5	—	7	—	84	
560, 561, 570 ..	Intestinal obstruction and hernia	24	47	—	9	2	1	17	1	382	
543, 571, 572, 764	Gastritis, enteritis and diarrhœa	23	32	—	35	1	—	9	—	303	
581	Cirrhosis of liver	33	33	—	26	2	—	7	—	126	
584, 585	Cholelithiasis, cholecystitis	27	36	—	29	1	—	7	1	271	
590-594	Nephritis and nephrosis	15	30	—	52	1	—	3	—	622	
643-649, 660, 670-678, 680, 683, 687-689 ..	Diseases of pregnancy, childbirth and puerperium	19	19	—	5	12	—	46	—	58	
750-759	Congenital malformations	28	37	—	22	1	—	11	—	509	
760, 761	Birth injury	45	35	—	10	1	—	9	—	185	
762	Postnatal asphyxia and atelectasis	41	43	—	7	2	—	7	—	257	
763	Pneumonia of newborn	53	30	—	3	1	—	12	—	73	
770	Hæmolytic disease of newborn	44	36	—	8	—	2	10	—	59	
774,776	Immaturity (without other disease peculiar to early infancy)	11	78	—	10	—	—	1	1	416	
794	Senility without psychosis	1	26	—	72	—	—	1	—	1,014	
780-789,790-793,795	Ill-defined and unknown cause	—	—	—	—	—	—	—	—	32*	
Rem. 210-795 ..	Other defined and ill-defined diseases ..	19	35	—	34	3	1	7	—	2,866	
001-795	All non-violent causes	8	30	—	55	1	—	6	1	53,833	
E810-835	Motor vehicle accidents	—	—	—	—	54	46	—	—	213	
E800-802, 840-962	All other accidents	—	2	—	1	51	44	2	1	996	
E963, 970-979 ..	Suicide	—	—	—	—	66	34	—	—	468	
E964, 965, 980-999	Homicide and operations of war	—	—	—	—	—	—	—	—	16*	
E800-999	All accidental and violent causes	—	1	—	1	56	41	1	—	1,693	
	All causes	8	29	—	53	2	2	6	1	55,526	

* Percentages based on less than 50 deaths are not shown.

RULES FOR CODING CAUSES OF DEATH

When a certificate of cause of death contains more than one condition, it is necessary for the coder to select one of them as the cause for primary mortality classification. The certificate consists of two parts : I, in which should be entered the direct cause of death and, below it, the antecedent causes which gave rise to the direct cause, with the underlying condition, the one which initiated the sequence of events leading to death, stated last ; and II, in which should be entered any other significant conditions which contributed to the death but were not related to the conditions entered in I.

If the certificate has been completed correctly, the cause stated last in part I will be the one selected for classification unless one of a number of exceptions to this general rule applies. These exceptions deal with cases where it is considered that a departure from the general rule will give a more precise picture of the cause of death. They are in effect coding conventions and the enquiry described here is not concerned with them. Where the certificate has not been completed correctly, however, certain other exceptions and supplementary rules must be applied which involve assumptions about the intention of the certifier or are purely arbitrary. A special enquiry was designed to test the results of the application of these exceptions and supplementary rules, to see whether they did, by and large, lead to the assignment intended by the certifier.

The instructions for selecting the underlying cause of death appear on pages 347-352 of Volume 1 of the Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death. The three exceptions concerned in the enquiry are stated as follows :—

- 1(d) Where the condition entered in I is clearly a direct sequel of a condition entered in II, the latter is to be preferred.
- 2(b) Where two or more conditions are entered in I in a highly improbable order of sequence, an error in the order of entry is to be assumed and the presumptive underlying condition selected.
- 2(c) Where it is highly improbable that the last stated condition entered in I could have been either the cause or a complication of the conditions entered above it, its entry in Part I is to be assumed to be an error and the selection made as though it had been entered in Part II as a significant contributory condition.

The supplementary rules are for use where it is impossible to select the underlying cause by applying the general rule or its exceptions, usually when two conditions are entered on the same line of Part I. They are intended to be applied in the order stated, i.e. each can be used only if those above it in the list do not apply. They can be summarised as follows :—

- 3(a) If one condition is frequently an immediate complication of the other, prefer the primary condition.
- 3(b) If one condition is an accident, poisoning, or other violence, prefer it.
- 3(c) If one is a surgical emergency or other very grave condition, prefer it.
- 3(d) If one is an infective or parasitic disease, prefer it.
- 3(e) If both are chronic conditions and the durations from onset to death are stated, prefer the one of longer duration.
- 3(f) Prefer the first mentioned.

The investigation covered deaths registered during two periods, September-November 1953 and March-June 1954 ; an enquiry form was sent to those doctors who certified deaths which required application of one of these exceptions or supplementary rules. It explained the reasons for the coder's assignment and asked him whether he agreed with it, preferred his original certification or had a third arrangement of the causes to propose.

The certifying doctors co-operated very well and out of a total of 516 enquiries, 482 were returned. Of these 394 represented agreement between doctor and coder and the remaining 88 represented disagreement ; they were distributed over the various exceptions and rules as follows :—

	Agreed	Disagreed	Total
Exception 1(<i>d</i>)	20	5	25
„ 2(<i>b</i>)	61	11	72
„ 2(<i>c</i>)	106	31	137
Supplementary rule 3(<i>a</i>)	7	3	10
„ „ 3(<i>b</i>)	—	—	—
„ „ 3(<i>c</i>)	—	—	—
„ „ 3(<i>d</i>)	3	1	4
„ „ 3(<i>e</i>)	6	—	6
„ „ 3(<i>f</i>)	191	37	228
	—	—	—
Total	394	88	482
	—	—	—

Of the disagreements, 13 were cases where the doctor proposed an arrangement of the causes different from his original certificate and from that suggested by the coder, and 8 where he inserted or mentioned additional information. All these would have been assigned correctly if the rearrangement or additional information had been stated on the original certificate. In 9 other cases, the reply reiterated a sequence which was considered “highly improbable”—5 cases of cancer stated as “due to” a non-malignant condition, 1 of influenza “due to” pernicious anæmia, 1 of strangulated umbilical hernia “due to” hypertensive cardiac failure, 1 of tuberculosis “due to” chronic bronchitis, and 1 of perforated gastric ulcer “due to” bilateral bronchopneumonia.

Even including these cases, however, the enquiry shows that exceptions 1(*d*), 2(*b*) and 2(*c*) and the supplementary rules led to the correct assignment in over 80 per cent. of cases. A large number of the disagreements arose from the application of supplementary rule 3(*f*), which is acknowledged to be purely arbitrary and must inevitably lead to some errors with certificates completed in this manner. On the whole, it can be said that the procedures for dealing with incorrectly completed certificates operate with a satisfactory degree of accuracy.

GREAT BRITAIN AND IRELAND

Vital Statistics

Table A1 shows the census populations, by sex, of the several countries of Great Britain and Ireland for each census since 1821, and mid-year estimates for each of the last 36 years. Population estimates, marriages, births, deaths and infant deaths for the current year are shown in Table W and repeated, with comparative rates for earlier years, in Table CX.

Table CX.—Great Britain and Ireland. Vital Statistics. 1938, 1946 to 1953

		Great Britain and Ireland	England and Wales	Scotland	Northern Ireland	Irish Republic	Wales
Estimated Mid-Year Home Population (in thousands)							
1953	Males	25,823	21,206	2,444	675	1,498	1,275
	Females	27,732	22,903	2,673	709	1,447	1,321
	Persons	53,555	44,109	5,117	1,384	2,945	2,596
Marriages							
1953	Persons married per 1,000 living	410,944	344,998	40,927	9,416	15,603	19,967
1938	.. ..	16·8	17·6	15·5	13·4	10·1	16·2
1946	.. ..	17·6	18·0	17·7	14·5	11·8	—
1947	.. ..	18·0	18·6	17·2	14·1	11·0	—
1948	.. ..	17·6	18·2	16·8	13·7	10·8	—
1949	.. ..	16·6	17·1	16·0	13·4	10·9	—
1950	.. ..	15·8	16·3	15·5	13·2	10·9	—
1951	.. ..	16·0	16·5	16·2	13·7	10·7	16·0
1952	.. ..	15·6	15·9	16·1	13·5	10·7	15·9
1953	.. ..	15·3	15·6	16·0	13·6	10·6	15·4
Live Births*							
1953	Per 1,000 living	866,281	684,372	90,913	28,794	62,202	41,528
1938	.. ..	15·7	15·1	17·7	20·0	19·4	15·3
1946	.. ..	19·6	19·2	20·2	22·3	22·9	—
1947	.. ..	20·8	20·5	21·9	23·2	23·2	—
1948	.. ..	18·3	17·8	19·3	21·7	22·0	—
1949	.. ..	17·2	16·7	18·4	21·2	21·5	—
1950	.. ..	16·5	15·8	17·7	20·9	21·3	—
1951	.. ..	16·1	15·5	17·7	20·7	21·2	16·0
1952	.. ..	16·1	15·3	17·7	20·9	21·8	16·0
1953	.. ..	16·2	15·5	17·8	20·9	21·1	16·0

* England and Wales: occurrences; remainder: registrations.

Table CX.—*continued*

		Great Britain and Ireland	England and Wales	Scotland	Northern Ireland	Irish Republic	Wales
Deaths†							
1953		611,805	503,529	58,878	14,813	34,585	31,392
Per 1,000 living							
1931–1938‡	..	12·4	12·0	13·3	14·4	14·2	12·9
1946		12·3	12·0	13·1	12·5	14·0	—
1947		12·3	12·0	12·9	12·6	14·8	—
1948		11·0	10·8	11·8	11·2	12·1	—
1949		11·8	11·7	12·3	11·4	12·7	—
1950		11·7	11·6	12·4	11·6	12·7	—
1951		12·7	12·5	12·9	12·8	14·3	13·9
1952		11·4	11·3	12·0	10·8	11·9	12·0
1953		11·4	11·4	11·5	10·7	11·7	12·1
Deaths of Infants under 1 year§							
1953		24,662	18,324	2,800	1,090	2,448	1,299
Per 1,000 live births							
1938		55	53	70	75	67	57
1946		44	43	54	54	65	47
1947		45	41	56	53	68	49
1948		37	34	45	46	50	39
1949		35	32	41	45	51	39
1950		32	30	39	40	45	35
1951		32	30	37	41	45	36
1952		30	28	35	39	41	33
1953		28	27	31	38	39	31

† Deaths include those of non-civilians registered in the country. Death rates, except for the Irish Republic, are based on civilian deaths and populations for 1946. From 1947 to 1949 inclusive, the death rates for England and Wales and for Northern Ireland are based on total deaths and populations, and those for Scotland on total deaths and populations excluding armed forces overseas in 1939. The death rates from 1950 are based on total deaths and home populations.

† Crude death rates in 1938 were rather lower than in adjacent years.

§ England and Wales: deaths per 1,000 related live births; remainder: deaths per 1,000 live births registered in the year.

Population.—The combined home population of Great Britain and Ireland at mid-1953 was estimated at 53,555,000, an increase of 5·6 per cent above that of 1939. The corresponding increase for England and Wales was about 6 per cent, for Scotland 2 per cent, for Northern Ireland 7 per cent and for the Irish Republic $\frac{1}{2}$ per cent.

Marriage Rates.—The crude marriage rate declined a little in 1953 compared with 1952 in all the countries except Northern Ireland where the rate increased slightly. It was above the pre-war level in Scotland and Ireland, but in England and Wales the crude rate was below that of 1938. The crude rates, however, are somewhat misleading, as they are based on the total population of which only the non-married component is at risk and this component has been reduced by high marriage rates for over a decade. The detailed analysis in the Marriage chapter of this volume shows that in fact, in relation to the non-married population, marriage incidence in England and Wales is still very much higher than before the war.

Birth Rates.—Crude birth rates, which had been declining from their post-war peak in 1947, remained fairly steady after 1951. In England and Scotland there was even a very small increase in 1953.

Death Rates.—Crude death rates in 1953 were about the same as in the previous year except in Scotland where a fall of 0·5 brought the rate to within 0·1 of that for England and Wales.

Infant Mortality Rates.—The death rates of infants under 1 year of age per 1,000 live births were lower in 1953 than ever before. The combined rate per 1,000 for the whole of Great Britain and Ireland was 28, and the individual rates were 27 in England and Wales, 31 in Scotland, 38 in Northern Ireland and 39 in the Irish Republic.

Causes of Death in the United Kingdom.—Numbers of deaths and crude death rates in 1953 for a short list of causes are given in Table CXI for the United Kingdom as a whole and for the constituent countries.

In relation to rates for the United Kingdom as a whole, mortality from respiratory tuberculosis was high among men in Wales and among women in Scotland and Northern Ireland. The mortality from cancer of the stomach was higher for each sex in Wales, whereas mortality from cancer of the lung (each sex) and from cancer of the breast (female) were notably lower in Northern Ireland. The latter area had the highest rate for acute rheumatic fever but, together with Scotland, the lowest for chronic rheumatic heart disease. Deaths ascribed to intracranial vascular disorders, coronary and myocardial disease, tended to be higher in Scotland, but fewer deaths were assigned to hypertension.

In Wales a lower mortality from pneumonia was recorded for females whereas death rates from bronchitis were much higher in Wales and in England than in Scotland and Northern Ireland.

Large differences were recorded in the proportions of deaths assigned to senility, arising from differences in certification and classification between the countries.

Mortality from motor vehicle accidents showed no large variations, but the rates for fatal accidents of other kinds were notably higher in Scotland (each sex) and in Wales (males). The high figures in Northern Ireland, especially for males, are largely due to the fact that most of the bodies recovered from the *M.V. Princess Victoria*, which foundered in the North Channel on 31st January, 1953, were brought to Northern Ireland ports. The suicide rates for each sex were highest in England, lower in Wales and Scotland, and lowest in Northern Ireland.

Table CXI.—Deaths and Death Rates by Cause and Sex, 1953. United Kingdom and its Divisions

Cause of Death (and International Classification numbers)	Sex	Deaths						Death Rates per million living					
		Deaths						Death Rates per million living					
		United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland	United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland
All causes	M. F.	297,486 279,734	289,816 272,591	242,373 229,764	17,117 14,275	30,326 28,552	7,670 7,143	12,226 10,653	12,251 10,669	12,161 10,646	13,425 10,806	12,408 10,682	11,363 10,075
Tuberculosis of respiratory system (001-008)	M. F.	6,315 3,014	6,171 2,901	5,000 2,281	447 185	724 435	144 113	260 115	261 114	251 106	351 140	296 163	213 159
Tuberculosis, other forms (010-019)	M. F.	632 598	604 567	481 420	36 52	87 95	28 31	26 23	26 22	24 19	28 39	36 36	41 44
Syphilis and its sequelæ (020-029)	M. F.	1,088 479	1,073 468	941 432	60 12	72 24	15 11	45 18	45 18	47 20	47 9	29 9	22 16
Typhoid fever (040)	M. F.	3 3	2 3	1 2	— —	1 1	1 —	0 0	0 0	0 0	— —	0 0	1 —
Cholera (043)	M. F.	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Dysentery, all forms (045-048)	M. F.	27 24	27 22	19 17	— —	8 5	— 2	1 1	1 1	1 1	— —	3 2	— 3
Scarlet fever and streptococcal sore throat (050-051)	M. F.	26 40	25 40	21 34	2 4	2 2	1 —	1 2	1 2	1 2	2 3	1 1	1 —
Diphtheria (055)	M. F.	12 14	12 13	11 12	— —	1 1	— 1	0 1	1 1	1 1	— —	0 0	— 1
Whooping cough (056)	M. F.	124 173	119 165	96 130	8 9	15 26	5 8	5 7	5 6	5 6	6 7	6 10	7 11
Meningococcal infections (057)	M. F.	189 147	186 142	155 112	11 13	20 17	3 5	8 6	8 6	8 5	9 10	8 6	4 7
Plague (058)	M. F.	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Acute poliomyelitis (080)	M. F.	214 134	205 128	190 115	9 6	6 7	9 6	9 5	9 5	10 5	7 5	2 3	13 8
Smallpox (084)	M. F.	6 2	6 2	6 2	— —	— —	— —	0 0	0 0	0 0	— —	— —	— —
Measles (085)	M. F.	154 123	153 121	128 94	14 9	11 18	1 2	6 5	6 5	6 4	11 7	5 7	1 3
Typhus and other rickettsial diseases (100-108)	M. F.	— 1	— 1	— 1	— —	— —	— —	— 0	— 0	— 0	— —	— —	— —

Table CXI.—continued.

Cause of Death (and International Classification numbers)	Sex	Deaths						Death Rates per million living					
		United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland	United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland
Malaria (110-117)	{ M. F.	5 —	5 —	3 —	1 —	1 —	— —	0 —	0 —	0 —	1 —	0 —	— —
All other diseases classified as infective and parasitic	{ M. F.	661 619	632 609	520 528	43 27	69 54	29 10	27 24	27 24	26 24	34 20	28 20	43 14
Malignant neoplasms (140-205)	{ M. F.	52,335 47,904	51,245 46,804	43,113 39,609	2,822 2,380	5,310 4,815	1,090 1,100	2,151 1,824	2,166 1,832	2,163 1,835	2,213 1,802	2,173 1,801	1,615 1,551
Malignant neoplasm of stomach (151)	{ M. F.	9,153 7,242	8,935 7,033	7,407 5,765	637 444	891 824	218 209	376 276	378 275	372 267	500 335	365 308	323 295
Malignant neoplasm of trachea, bronchus and lung (162-163)	{ M. F.	14,536 2,595	14,353 2,552	12,205 2,163	676 88	1,472 301	183 43	597 99	607 100	612 100	530 67	602 113	271 61
Malignant neoplasm of breast (170)	{ M. F.	89 9,144	87 8,980	74 7,723	7 435	6 822	2 164	4 348	4 351	4 358	5 329	2 308	3 231
Malignant neoplasm of uterus (171-174)	F.	4,536	4,421	3,707	238	476	115	173	173	172	180	178	162
Leukæmia and aleukæmia (204)	{ M. F.	1,270 1,105	1,234 1,083	1,046 964	70 41	118 78	36 22	52 42	52 42	52 45	55 31	48 29	53 31
Other malignant and lymphatic neoplasms (remainder of 140-205)	{ M. F.	27,287 23,282	26,636 22,735	22,381 19,287	1,432 1,134	2,823 2,314	651 547	1,121 887	1,126 890	1,123 894	1,123 858	1,155 866	964 772
Benign and unspecified neoplasms (210-239)	{ M. F.	900 1,005	876 986	781 858	57 60	38 68	24 19	37 38	37 39	39 40	45 45	16 25	36 27
Diabetes mellitus (260)	{ M. F.	1,225 2,489	1,195 2,438	1,003 1,983	63 145	129 310	30 51	50 95	51 95	50 92	49 110	53 116	44 72
Anæmias (290-293)	{ M. F.	681 1,216	654 1,170	547 939	33 85	74 146	27 46	28 46	28 46	27 44	26 64	30 55	40 65
Vascular lesions affecting central nervous system (330-334)	{ M. F.	33,358 45,532	32,543 44,421	26,788 36,838	1,974 2,469	3,781 5,114	815 1,111	1,371 1,734	1,376 1,739	1,344 1,707	1,548 1,869	1,547 1,913	1,207 1,567
Non-meningococcal meningitis (340)	{ M. F.	268 210	260 203	212 172	18 12	30 19	8 7	11 8	11 8	11 8	14 9	12 7	12 10
Rheumatic fever (400-402)	{ M. F.	182 214	166 189	127 155	16 12	23 22	16 25	7 8	7 7	6 7	13 9	9 8	24 35
Chronic rheumatic heart disease (410-416)	{ M. F.	3,685 6,166	3,608 6,036	3,135 5,132	199 371	274 533	77 130	151 235	153 236	157 238	156 281	112 199	114 183

Table CXI.—continued.

Cause of Death (and International Classification numbers)	Sex	Deaths						Death Rates per million living					
		United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland	United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland
Arteriosclerotic heart diseases, including coronary disease (420)	M.	M. 78,945	{ 43,885	36,386	2,580	4,919	M. 2,030	M. 3,244	{ 1,855	1,826	2,024	2,013	M. 3,007
	F.	F. 72,597	{ 25,580	21,544	1,241	2,795	F. 1,714	F. 2,765	{ 1,001	998	939	1,046	F. 2,417
Degenerative heart disease (421, 422)	M.		{ 33,030	27,401	1,884	3,745			{ 1,396	1,375	1,478	1,532	
	F.		{ 45,303	38,053	2,347	4,903			{ 1,773	1,763	1,777	1,834	
Other diseases of heart (430-434)	M.	4,398	4,173	3,382	206	585	225	181	176	170	162	239	333
	F.	4,778	4,552	3,732	210	610	226	182	178	173	159	228	319
Hypertension with heart disease (440-443)	M.	5,831	5,638	4,904	312	422	193	240	238	246	245	173	286
	F.	6,868	6,652	5,759	325	568	216	262	260	267	246	212	305
Hypertension without mention of heart (444-447)	M.	4,472	4,374	3,736	285	353	98	184	185	187	224	144	145
	F.	4,579	4,502	3,846	256	400	77	174	176	178	194	150	109
Other circulatory diseases (450-468)	M.	7,733	7,630	6,451	452	727	103	318	323	324	355	297	153
	F.	8,626	8,512	7,335	444	733	114	328	333	340	336	274	161
Influenza (480-483)	M.	3,094	3,039	2,768	137	134	55	127	128	139	107	55	81
	F.	3,760	3,698	3,434	126	138	62	143	145	159	95	52	87
Pneumonia (490-493)	M.	11,869	11,572	10,236	462	874	297	488	489	514	362	358	440
	F.	11,158	10,881	9,712	349	820	277	425	426	450	264	307	391
Bronchitis (500-502)	M.	20,874	20,610	18,303	1,199	1,108	264	858	871	918	940	453	391
	F.	11,690	11,534	10,390	500	644	156	445	451	481	379	241	220
Other diseases of respiratory system (470-475, 510-527)	M.	3,761	3,686	2,810	473	403	75	155	156	141	371	165	111
	F.	1,703	1,632	1,355	93	184	71	65	64	63	70	69	100
Ulcer of stomach and duodenum (540-541)	M.	4,298	4,219	3,599	196	424	79	177	178	181	154	173	117
	F.	1,491	1,468	1,273	58	137	23	57	57	59	44	51	32
Appendicitis (550-553)	M.	624	612	524	26	62	12	26	26	26	20	25	18
	F.	414	408	330	26	52	6	16	16	15	20	19	8
Intestinal obstruction and hernia (560-561, 570)	M.	1,711	1,672	1,390	94	188	39	70	71	70	74	77	58
	F.	1,760	1,715	1,422	84	209	45	67	67	66	64	78	63
Gastritis, enteritis and diarrhoea except diarrhoea of newborn (543, 571-572)	M.	1,302	1,206	971	86	149	96	54	51	49	67	61	142
	F.	1,534	1,483	1,244	83	156	51	58	58	58	63	58	72
Cirrhosis of liver (581)	M.	761	751	611	39	101	10	31	32	31	31	41	15
	F.	589	574	467	38	69	15	22	22	22	29	26	21

Table CXI.—continued.

Cause of Death (and International Classification numbers)	Sex	Deaths					Death Rates per million living						
		United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland	United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland
Nephritis and nephrosis (590-594)	M. F.	3,161 3,024	3,072 2,937	2,565 2,409	237 218	270 310	89 87	130 115	130 115	129 112	186 165	110 116	132 123
Hyperplasia of prostate (610) ..	M.	4,730	4,568	3,815	358	395	162	194	193	191	281	162	240
Complications of pregnancy, child- birth and puerperium (640-689)	F.	630	613	487	40	86	17	24	24	23	30	32	24
Congenital malformations (750-759)	M. F.	2,653 2,440	2,537 2,342	2,069 1,918	147 127	321 297	116 98	109 93	107 92	104 89	115 96	131 111	172 138
Birth injuries, postnatal asphyxia and atelectasis (760-762) ..	M. F.	3,169 2,026	3,043 1,939	2,475 1,590	165 97	403 252	126 87	130 77	129 76	124 74	129 73	165 94	187 123
Diarrhoea of newborn (764) ..	M. F.	M. 729 F. 463	{ 44 32 }	{ 28 20 }	{ 8 4 }	{ 8 8 }	{ M. 34 F. 12 }	{ M. 30 F. 18 }	{ 2 1 }	{ 1 1 }	{ 6 3 }	{ 3 3 }	{ M. 50 F. 17 }
Other infections of newborn (763, 765-768)	M. F.	3,135 2,331	2,984 2,230	2,357 1,827	214 134	413 269	151 101	129 89	126 87	118 85	168 101	169 101	224 142
Other diseases of early infancy, and immaturity unqualified (770-776)	M.	3,929	3,602	2,498	306	798	327	161	152	125	240	327	484
Senility without mention of psy- chosis, ill-defined and unknown causes (790-795) ..	F.	6,080	5,653	4,381	453	819	427	232	221	203	343	306	602
All other diseases (remainder 001-795) ..	M. F.	9,726 12,316	9,371 11,953	7,756 9,886	579 746	1,036 1,321	355 363	400 469	396 468	389 458	454 565	424 494	526 512
Motor vehicle accidents (E810- E835) ..	M. F.	3,870 1,203	3,763 1,175	3,125 972	217 61	421 142	107 28	159 46	159 46	157 45	170 46	172 53	159 39
All other accidents (E800-E802, E840-E962) ..	M. F.	7,174 5,606	6,906 5,433	5,323 4,398	470 267	1,113 768	268 173	295 213	292 213	267 204	369 202	455 287	397 244
Suicide and self-inflicted injury (E963, E970-E979) ..	M. F.	3,240 1,841	3,208 1,827	2,893 1,666	127 68	188 93	32 14	133 70	136 72	145 77	100 51	77 35	47 20
Homicide and operations of war (E964, E965, E980-E999) ..	M. F.	207 120	203 115	174 99	4 —	25 16	4 5	9 5	9 5	9 5	3 —	10 6	6 7

INTERNATIONAL CO-OPERATION IN POPULATION AND HEALTH STATISTICS

United Nations

Population Commission

The seventh session of the Population Commission was held in New York from the 19th to the 30th of January, 1953. The United Kingdom was represented by Mr. N. H. Carrier of the General Register Office.

The session was attended by representatives of all the fifteen States entitled to nominate members. Mr. D. Vogelink (Yugoslavia) was elected Chairman; Mr. G. Jardim (Brazil) Vice-Chairman; the United Kingdom representative was elected *Rapporteur* and Mr. J. Mertens de Wilmars (Belgium) *Assistant Rapporteur*.

In its Report,¹ the Commission recommended three resolutions for adoption by the Economic and Social Council. The first of these aimed at drawing the attention of Member governments to a report, originally prepared by the Secretariat for the consideration of the Commission, and since published under the title *Determinants and Consequences of Population Trends*. This report summarises the state of contemporary knowledge of the effects of social and economic changes on population trends (i.e. on birth and death rates, fertility, migration, population structure, etc.) and is particularly valuable as a reference work to the literature on the relations between population and developments in other fields. The second resolution was designed to encourage the Secretary-General of United Nations to give, within the limits of available resources and with due regard to the priorities indicated by the Commission, appropriate technical assistance to governments requesting help in making analytical studies of the *results of their censuses*. The third resolution, on the subject of internal migration, was included in the Report at the instance of the representatives of the less developed countries; the aim of the sponsors being to emphasise the social and economic implications of internal migration, with particular reference to the process of economic development, and to get the subject recognised as suitable for attracting technical assistance.

It was at this session of the Commission that plans for the *World Population Conference* reached a more definite stage. The Commission considered an invitation from the Italian Government to hold the Conference in Rome and, as its recommendation to the Economic and Social Council showed, the members were much in favour of accepting this offer of hospitality. In addition to discussing the venue of the Conference, the Commission emphasised the desirability of focusing the agenda on the more important population problems and pointed to the danger that the Conference might be less effective if discussion became too diffuse through the inclusion of too many topics. Apart from this general statement, however, the Commission did not specify what the scope of the Conference should be. The Economic and Social Council had already decided that the Conference should be devoted solely to the exchange of ideas and experience on population matters among experts in the field concerned.

Another of the more substantial matters discussed by the Commission was a series of draft recommendations designed to improve and standardise vital statistics. The Commission's views on the recommendations, subsequently published under the title of *Principles for a Vital Statistics System*,² were set out in detail in an appendix to its Report. The draft recommendations had previously been submitted to governments for comment and one of the more important observations made by the United Kingdom, namely, that the "principles" would be more useful and generally acceptable if an indication were given of the extent to which they were applicable in varying local conditions, was incorporated in the body of the Commission's Report.³ For this purpose countries were regarded as belonging to one of three groups: those at a stage of development in which a general registration system is impracticable; those engaged in setting up a registration system, but not yet in a position to give more than a limited attention to vital statistics; and those with a well-established registration system who would be better able to give attention to improving the scope and quality of statistical information derived from it. It was the Commission's opinion that the "principles" were mainly applicable to countries in this last mentioned group. It was not intended that the principles should be regarded in any way as mandatory, but that they should serve as guides, representing a "goal" towards which countries might work.

The Commission also modified—in the light of comments made by governments and others—recommendations made for the improvement of *international migration statistics*.

Other matters considered by the Commission were the extent to which there were gaps in knowledge of the interaction of demographic, economic, and social factors; the demographic aspects of the programmes of regional economic commissions; national and local studies of population in relation to economic and social development of under-developed countries; analysis of the results of population censuses taken around 1950; recent trends in the birth rate; methods of measuring infant mortality; and a proposal that a study should be made of demographic aspects of problems of the aged.

Statistical Commission

The Statistical Commission held its seventh session from the 2nd to the 13th of February, 1953, in New York. The United Kingdom was represented by Mr. H. Campion, Director of the Central Statistical Office.

The Commission considered in detail the *principles for a vital statistics system* and drafted a resolution in which the Economic and Social Council was invited to draw the attention of countries to the importance of developing vital statistics and to request the Secretary-General to consult with countries and assist them in applying the principles. A statement of the "principles" was reproduced in the third Annex to the Commission's Report.⁴

The fourth Annex to the Report sets out in detail recommendations adopted by both the Population Commission and the Statistical Commission for improving *international migration statistics*.

Economic and Social Council

The Reports of the Population and Statistical Commissions were presented to the Economic and Social Council at its fifteenth session, held in New York from the 31st of March to the 28th of April.

The Report on the seventh session of the Population Commission was well received by the Social Committee of the Council when it was discussed at two meetings held on April the 7th. Two additional draft resolutions were added by the Social Committee to the three proposed by the Commission. Of these, one suggested that priority should be given to three subjects: (a) studies of the inter-relationships of demographic, economic and social factors; (b) analyses of future population trends; and (c) studies of migration, both international and internal. The other proposed that the Secretary-General be authorised to convene the World Population Conference at a place which would involve the least cost to the United Nations, but at Geneva or Rome if in Europe. The draft resolutions were adopted at the plenary session of the Council held on the 14th of April.⁵

The Economic Committee of the Council considered the Report on the seventh session of the Statistical Commission at two meetings, held on the 7th and 17th of April. The Commission's draft resolutions on *principles for a vital statistics system* and on *recommendations for migration statistics* were accepted by the Committee and adopted by the Council on the 27th of April.⁶

General Assembly

When the Report of the Economic and Social Council was discussed by the Third Committee at the Eighth General Assembly, the delegations of Brazil, Indonesia, Mexico and Peru together tabled a draft resolution (dated 26th October, 1953), based on one of the resolutions adopted by the Council, inviting the Council, in co-operation with ILO and other interested agencies, to encourage—within available resources—studies on internal migration. This resolution was adopted by the Third Committee and, subsequently, by the General Assembly⁷ in plenary session on the 28th of November.

World Health Organization

Executive Board

Two sessions of the Executive Board were held during the year, the eleventh from the 12th of January to the 4th of February and the twelfth from the 28th to the 30th of May. The second report of the *Joint ILO/WHO Committee on Occupational Health*⁸ was among those from expert committees approved for publication by the Board at its earlier meeting. There was further discussion of the subject at the later session, when the Board emphasised the growing importance of questions of occupational health because of rapid industrialization in many parts of the world and requested the Director-General to study the matter with the ILO in order to report at the thirteenth session on "measures for strengthening activities in this field".⁹

Sixth World Health Assembly

Mr. A. E. Joll and Dr. W. P. D. Logan (both of the General Register Office) were members of the United Kingdom delegation that attended the Assembly. The Assembly was held in Geneva from the 5th to the 22nd of May.

Changes made at the beginning of the year in the organization of the WHO Secretariat included the abolition of the former Division of Health Statistics, which was merged with the Division of Epidemiological Services to form the Division of Epidemiological and Health Statistical Services, and the creation of a post of Director-Consultant in Health Statistics with no divisional responsibilities but in direct relationship with the Assistant Director-General, Central Technical Services. In commenting on these changes at the fourth meeting of the Assembly's Committee on Programme and Budget, the United Kingdom

delegation, while taking the view that functional changes of that kind must be judged by their practical results rather than by any theoretical appearance of logic or system, sounded a warning note lest the superficially more dramatic impact of statistics of infectious disease might overshadow the steady evolution of the perhaps more prosaic subjects of mortality statistics and morbidity statistics in general.¹⁰

First International Conference of National Committees, etc., on Vital and Health Statistics

A proposal made by the WHO Expert Committee on Health Statistics in the Reports of their second¹¹ and third¹² sessions that an international conference should be convened primarily for the purpose of reviewing the "objectives, organisational patterns, programmes and working relationships of national committees with each other and with international agencies" was drawn to the attention of Member governments of the World Health Organization in a resolution adopted by the Fifth World Health Assembly in May, 1952.¹³

Following preliminary consultations with governments a Preparatory Committee, of which Mr. A. E. Joll and Dr. W. P. D. Logan of the General Register Office were members, met in Paris in January, 1953, to consider the scope of the proposed conference and to prepare an outline of the arrangements which it would be necessary to make.¹⁴

The World Health Organization accepted an invitation from Her Majesty's Government to hold the conference in London and it took place at the General Register Office in Somerset House from the 12th to the 17th of October, 1953. The Conference was attended by delegations from the following twenty-eight Member States and Associated Members of WHO: Australia, Belgium, Canada, Costa Rica, Denmark, Dominican Republic, Ecuador, Federal Republic of Germany, Finland, France, India, Iraq, Irish Republic, Israel, Italy, Japan, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Thailand, Tunisia, United Kingdom of Great Britain and Northern Ireland, United States of America, Venezuela and Yugoslavia. Representatives of the International Labour Office, the International Statistical Institute and the Statistical Office of the United Nations were also present.

The Conference was opened by Dr. H. S. Gear, Assistant Director-General in charge of the Department of Central Technical Services of the World Health Organization, representing the Director-General, and was addressed at the opening meeting by the Right Honourable Ian MacLeod, Minister of Health, and by Sir Russell Brain, President of the Royal College of Physicians, who was elected Honorary President of the Conference.

The United Kingdom delegation, led by Sir Russell Brain, had as its Members Sir Ernest Rock Carling, Chairman of the Registrar General's Advisory Committee on Medical Nomenclature and Statistics; Professor A. Bradford Hill, a member of that Committee; Mr. A. E. Joll and Dr. W. P. D. Logan of the General Register Office; Dr. G. E. Godber, Ministry of Health; and Dr. P. L. McKinlay, Department of Health for Scotland and General Registry Office, Scotland. Dr. A. H. T. Robb-Smith, a member of the Advisory Committee on Medical Nomenclature and Statistics, Dr. Percy Stocks, late Chief Medical Statistician, General Register Office, Dr. N. M. Goodman, Ministry of Health, Dr. Wilson Rae, Colonial Office and Dr. E. A. Cheeseman, Northern Ireland, were Advisers to the delegation, of which Mr. R. M. Blaikley, General Register Office, was Secretary. Mr. L. C. Mulligan, Registrar General of Northern Ireland, and Mr. O. Nankivell, Colonial Office, attended as observers.

Professor A. Bradford Hill was unanimously elected Chairman of the Conference. Professor S. Somogyi (Italy) and Dr. N. Vejjavisit (Thailand) were elected Vice-Chairmen. The Conference appointed two Committees: one, with Dr. P. F. Denoix (France) as Chairman, Mr. J. Ros-Jimeno (Spain) as Vice-Chairman and Dr. H. L. Dunn (U.S.A.) as *Rapporteur*, to deal with the general subject of national committees or equivalent bodies and with the types of health statistics and relevant vital statistics suitable to countries at different stages of development; the other, with Dr. M. G. Neurdenburg (Netherlands) as Chairman, Mr. H. Geschwind (Sweden) as Vice-Chairman and Mr. Fraser Harris (Canada) as *Rapporteur*, to consider methods for improving the quality of health statistics and related vital statistics and for securing wider appreciation of their value, as well as to review the question of ways and means of giving effect to international regulations or recommendations.

The subjects discussed by the Conference and the recommendations made by it are set out in the Report¹⁵ under four main, with subsidiary, headings:

I *National Committees on Vital and Health Statistics.*

Objectives; functions and constitution; relations with other bodies; the role of the World Health Organization.

II *Health Statistics and related vital statistics required by various countries according to the degree of development of their health and administrative services.*

Areas in which health and statistical services are highly developed, under-developed or in an intermediate stage of development.

III *Methods of improving the quality of health statistics.*

Use of sampling methods ; problems of confidentiality ; instructions to medical practitioners and students, with particular reference to certification of cause of death ; training of statistical personnel ; co-operation of persons concerned with supplying data ; the role of the WHO Centre for the Classification of Diseases ; methods of securing appreciation of the value of health statistics.

IV *Implementation of international recommendations or regulations.*

WHO Regulations No. 1 (concerning the compilation and publication of cause of death and morbidity statistics) ; application of WHO definitions of "live birth" and "foetal death" ; principles for a vital statistics system.

The Minister of Health received the delegates at a reception given by Her Majesty's Government at Lancaster House in the evening of the 12th of October. On the following evening delegates attended a reception given by the President and Fellows of the Royal College of Physicians of London. Dr. M. Pascua, WHO Director-Consultant on Health Statistics and Secretary of the Conference, gave a reception at B.M.A. House on the 14th of October on behalf of the Director-General of the World Health Organization; and on the 15th of October the Dean of the London School of Hygiene and Tropical Medicine gave a reception at the School.

WHO Centre for Classification of Diseases

Dr. P. Stocks, C.M.G., M.D., F.R.C.P. retired from the direction of the Centre, which is located in the General Register Office, at the end of 1952 and was succeeded by Dr. W. P. D. Logan, M.D., Ph.D., D.P.H.

Organization For European Economic Co-operation

Manpower Committee

Among other commitments, the O.E.E.C. Convention pledges the contracting parties to “make the fullest and most effective use of their available manpower”¹⁶ and a Manpower Committee was set up by the Organization in 1948. This Committee has given a good deal of attention to the question of surplus manpower in some European countries and, in order to improve the factual bases on which planning must depend, a Group of Experts was appointed to examine future population trends.

The Group, which has been mainly concerned to get from different countries forecasts of population size which are reasonably comparable one with another, met for the third time in Paris on the 26th of May of the year under review. Mr. G. Price-Jones attended as the United Kingdom representative. At this meeting the Group compared various bases on which forecasts might be made and agreed the draft of a questionnaire which was sent, later in the year, to member Governments for completion.

Second Conference of Colonial Government Statisticians

The Second Conference of Colonial Government Statisticians, held at the Colonial Office from the 22nd of April to the 7th of May, 1953, reviewed progress made since the First Conference,¹⁷ held in 1950, and laid plans for the future.

Members of the General Register Office Staff—Mr. A. E. Joll, Mr. H. M. Fletcher, Mr. B. Benjamin and Miss M. P. Newton—attended as advisers on vital statistics and registration. The outcome of discussions on these topics is recorded in the second chapter of the report on the Conference.¹⁸

International Statistical Institute

The twenty-eighth session of the International Statistical Institute was held in Rome from the 6th to the 12th of September, 1953. Mr. B. Benjamin, General Register Office, took part in the meeting and read a paper on *vital statistics and productivity*¹⁹ in that part of the programme concerned with the application of statistics to the study of problems of industrial productivity. Demographic statistics formed one of the other sectional items on the agenda and the papers submitted for discussion under this head covered a wide range.²⁰

Visitors from Overseas

During the year under review, thirty visitors came to the General Register Office from seventeen countries overseas, either as students to study the work of the Office or as officials to discuss matters related to registration, census or vital statistics. The countries to which they belonged were:—Canada, Ceylon, El Salvador, Finland, Germany, the Gold Coast, India, Iraq, Israel, Malta, Pakistan, Puerto Rico, the Sudan, Syria, Thailand, the United States and Yugoslavia.

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18. Second Conference of Colonial Government Statisticians : *Report* (Colonial No. 301). H.M.S.O., London, 1954.
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THE REGISTRATION SERVICE

Searches and Certificates

Table CXII shows the extent to which the records in the General Register Office have been used since 1866.

Table CXII

Year*	Total searches	Searches for Govt. Depts.	Searches paid for by the public	Certificates issued	Amount received
1866	12,135	—	12,135	10,017	£ 1,860 15 6
1875	26,356	—	26,356	20,282	3,879 15 6
1885	36,450	—	36,450	27,682	5,317 13 6
1895	53,289	—	53,289	35,727	7,200 12 6
1905	65,142	—	65,142	50,310	9,611 9 0
1915	202,939	118,788	84,151	69,746	13,007 10 0
1925†	488,781	339,790	148,991	115,378	25,610 2 6
1935	591,056	443,783	147,273	119,351	26,221 9 6
1945	569,266	380,730	188,536	187,077	39,474 14 3
1946	826,380	544,843	281,537	271,208	56,676 8 9
1947	1,180,519	873,868	306,651	299,525	61,900 15 6
1948†	943,705	658,251	285,454	350,626	56,954 15 9
1949	793,386	527,814	265,572	310,723	52,728 3 6
1950	732,511	486,386	246,125	285,487	51,215 17 8
1951	809,702	555,067	254,635	312,595	52,966 8 0
1952	778,139	545,390	232,749	293,384	‡57,569 7 6
1953†	613,343	402,767	210,576	278,757	62,437 3 4

* These periods relate to 52 weeks except those marked † which relate to 53 weeks.

‡ On 1st July, 1952, fees were increased by 50 per cent.

Table CXIII analyses the searches undertaken on behalf of Government Departments since 1946.

Table CXIII

Year*	1946	1947	1948†	1949	1950	1951	1952	1953†
Contributory Pensions and National Insurance Benefits	301,937	415,294	411,897	264,344	300,050	354,952	355,655	313,364
Family Allowances	78,987	362,846	170,204	182,308	127,013	147,743	138,115	45,946
Non-Contributory Pensions	58,321	46,863	38,250	23,917	22,430	13,210	10,825	7,346
Ministry of Pensions	94,350	39,010	27,028	25,456	20,593	19,748	18,574	17,981
Navy, Army and Air Force	11,248	9,855	8,872	10,932	7,612	12,339	13,817	8,559
Others	—	—	2,000	20,857	8,688	7,075	8,404	9,571
Total	544,843	873,868	658,251	527,814	486,386	555,067	545,390	402,767

* These periods relate to 52 weeks except those marked † which relate to 53 weeks.

Table CXIV shows the numbers of Birth and Adoption certificates issued from the General Register Office since 1946 including short certificates introduced in 1947.

Table CXIV

Year*	Birth Certificates			Adoption Certificates			Adoptions registered
	Standard	Short	Total	Standard	Short	Total	
1946	195,163	—	195,163	22,000	—	22,000	21,280
1947	211,000	1,060	212,060	18,600	1,150	19,750	18,269
1948†	176,631	62,662	239,293	13,112	32,331	45,443	18,550
1949	158,510	59,167	217,677	13,464	20,370	33,834	17,331
1950	143,135	55,307	198,442	10,102	15,824	25,926	12,748
1951	153,935	67,697	221,632	10,080	15,688	25,768	13,854
1952	132,431	73,505	205,936	9,940	14,666	24,606	13,900
1953†	111,325	84,063	195,388	9,417	14,048	23,465	13,001

* These periods relate to 52 weeks except those marked † which relate to 53 weeks.

NATIONAL HEALTH SERVICE CENTRAL REGISTER .. .. .	242

During the year 1953, the National Health Service Central Register received notifications of 1,422,589 persons who were reported as having registered with doctors for the first time. It was found from the register that 114,082 of these were already on doctors' lists.

The Central Register also notified Executive Councils of the names of 1,017,204 persons for removal from doctors' lists by reason of death (499,407), enlistment (247,287), embarkation (252,896) or becoming long-term patients in mental hospitals (17,614). In addition, 1,309,826 persons were notified as having changed their doctor on removal from the area of one Executive Council to another.

PARLIAMENTARY AND LOCAL GOVERNMENT ELECTORS

Electoral Registers

As required by the Electoral Registers Act and the Representation of the People Act, 1949, a local register based on a canvass is prepared in the autumn of each year, distinguishing between (a) those who are parliamentary and local government electors by virtue of residence on the qualifying date and (b) local government electors who on the qualifying date had a non-resident qualification by occupying as owner or tenant any rateable land or premises of not less than £10 rateable value per occupier. There is also a service register for any members of the forces and other persons employed in the service of the Crown in a post outside the United Kingdom (and for their wives if with them). The qualifying date is 20th November in England and Wales and the registers must be published not later than 15th March of the following year.

Total Electorate

The particulars recorded in Tables U and V for 1953 have been taken from statements furnished to the Registrar General by the Electoral Registration Officers of the several areas, and relate to the register which came into force on 16th March, 1953.

Table U refers to Parliamentary and Table V to Local Government electors and elections. From these tables has been extracted the summary in Table CXV showing the total electorate at various dates, selected to demonstrate the changing franchise. Comparison of the registers of 1928 and 1929 shows the effect of the commencement of the Act of 1928, the first to give to women the same franchise as to men, and comparison of the registers of 1939 and 1945 indicates the effect of the Act of 1945, which increased the local government electorate by the addition of those qualified for the parliamentary electorate but previously not entitled to vote at local government elections.

The total parliamentary electorate included before 1949 plural representation in the case of those persons registered in more than one constituency by reason of their possessing the necessary residence or business qualification or being entitled to be registered in respect of a University constituency.

Table CXV.—Parliamentary and Local Government Electors, 1918 to 1953, England and Wales.

Register	Parliamentary Register (including University Constituencies to 1948)			Local Government Register
	Total	Business Premises qualifications (included in Total)	Persons on Absent Voters' List (included in Total)	
1918 (Autumn)	17,222,983	159,013	3,362,028	13,930,130
1928 (Autumn)	19,866,649	205,793	154,432	17,179,487
1929 (Spring)	25,095,793	371,594	174,731	18,620,395
1939 (Autumn)	28,348,555	354,831	168,480	21,685,772

Table CXV.—*continued*

Register (Qualifying date in brackets)	Parliamentary Register (including University Constituencies to 1948)			Local Government Register at qualifying date
	Total at qualifying date	Business Premises Register (included in Total)	Service Register (included in Total)	
1945 (30th June)	29,368,684	55,164	2,749,531	29,216,823
1948 (30th June)	31,629,861	49,575	284,004	31,455,419
1949 (10th June)	30,173,966	—	127,334	30,258,862
1952 (20th Nov. 1951)	30,472,288	—	272,264	30,584,434
1953 (20th Nov. 1952)	30,491,691	—	274,646	30,606,472

A person not of full age on the qualifying date but of full age on the following 15th June is to be included on the register though there is no entitlement to vote in any election before 2nd October of the following year. Such persons have been excluded from the table; the 1951 register was the first to be affected in this way.

The percentages which the total parliamentary electorate represented of the estimated total population in selected years from 1939 to 1953 were:—

1939	1945	1946	1948	1949	1952	1953
68·1	68·9	72·0	72·7	68·9	69·0	68·8

The changes made in Parliamentary franchise between 1939 and 1945-48 did not affect sufficiently large numbers of persons to exert a significant influence on the percentages, though the varying methods of compiling the registers had some effect. In the years 1944 to 1948 the electoral registers were maintained by the machinery of National Registration, while those up to 1939 and from 1949 onwards were based on a canvass. The former procedure must have secured a somewhat speedier and more complete addition to the registers than the latter of persons who had moved into a new area or otherwise acquired new voting qualifications, but it may have made less difference in securing the removal from electoral registers of persons no longer qualified. This would account for the fall in the proportion in 1949 when the first post-war register based on a canvass was prepared.* (The relatively low proportion in 1945 is probably due in part to incompleteness in the service register of that year.) The number of parliamentary electors registered in England and Wales since 1939 has corresponded almost exactly with the estimated total population aged 21 and over excluding aliens resident here. This indicates that the gross discrepancies due to time lags in adding names to the registers or removing them and to various errors, and the net discrepancies in different constituencies, largely cancel out when aggregated for the country as a whole.

In contrast the Local Government franchise was made larger after the war. Reference should be made to the Acts concerned, in particular to those of 1928, 1943, 1944 and 1945, for a precise record of the changes made, but in brief the *parliamentary* qualification had previously been based on *residence* and the

* A minor influence in the same direction was the abolition (by the Representation of the People Act, 1948) of the business premises qualification and the university franchise.

local qualification on *occupation* of property; the Act of 1945 changed the basis of *local* qualification to residence *or* occupation. The change resulted in a substantial rise in the proportion of the total population included in the local electorate from 52·3 per cent in 1939 to 71·6 per cent in 1946 and 69·1 in 1953, the latter proportions being virtually the same as those for Parliamentary electors.

Central Index of Service Voters

During 1953 the Central Index of Service Voters received from Electoral Registration Officers 97,931 declarations by persons qualified to be included in the electoral registers as service voters. A further 49,150 declarations were received in respect of persons under the age of 21 years. The Central Index notified Electoral Registration Officers of 21,164 persons who had made declarations before reaching the age of 21 years, but who, during 1953, attained that age. Altogether 119,095 new service voters were added to the electoral registers.

In the same period Electoral Registration Officers were notified of 89,409 names of persons whose declarations ceased to be in force because of death, release from the forces, return from abroad of wives, Government servants, etc., and 19,489 declarations by persons under full age were cancelled because they ceased to have a service qualification before attaining full age.

APPENDIX A

(a) Population in thousands at ages 15-49 } England and Wales, 1953
 (b) Annual Marriages at ages under 50 }

Note.—In section (e), not stated ages have been rateably distributed.

Age	Population in thousands						Proportion married [(b) ÷ (a)] (d)		Number of marriages (e)		Marriages per 1,000 non-married at each age [(e) ÷ (c)] (f)	
	All marital conditions (a)		Married (b)		Non-married (Single, widowed and divorced) (c)							
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
15-19	1,409	1,381	7	59	1,402	1,322	·0050	·0427	8,735	56,095	6·2	42·4
20-24	1,468	1,447	351	727	1,117	720	·2391	·5024	145,570	166,830	130·3	231·7
25-29	1,560	1,553	1,016	1,219	544	334	·6513	·7849	93,675	53,954	172·2	161·5
30-34	1,670	1,692	1,351	1,425	319	267	·8090	·8422	37,628	24,320	118·0	91·1
35-39	1,501	1,548	1,282	1,305	219	243	·8541	·8430	17,467	13,027	79·8	53·6
40-44	1,650	1,689	1,444	1,395	206	294	·8752	·8259	12,266	9,981	59·5	33·9
45-49	1,606	1,661	1,413	1,310	193	351	·8798	·7887	8,689	7,552	45·0	21·5
15-49	10,864	10,971	6,864	7,440	4,000	3,531	·6318	·6782	324,030	331,759	81·0	94·0
20-39	6,199	6,240	4,000	4,676	2,199	1,564	·6453	·7494	294,340	258,131	133·9	165·0

APPENDIX B

List of Rural Districts selected by criteria set out on page 175

Berkshire :	Norfolk :	Startforth
Farringdon	Docking	Thirsk
Hungerford	Wayland	Wath
Wantage	Northamptonshire :	Yorkshire, West Riding :
Cheshire :	Brackley	Bowland
Tarvin	Northumberland :	Selby
Cornwall :	Bellingham	
Launceston	Oxfordshire :	Anglesey :
Wadebridge	Chipping Norton	Twrcelyn
Devon :	Shropshire :	Valley
Axminster	Drayton	Brecknockshire :
Bideford	Wem	Builth
Broadwoodwidge	Somerset :	Hay
Holsworthy	Dulverton	Cardiganshire :
Honiton	Langport	Aberayron
Kingsbridge	Williton	Aberystwyth
Okehampton	Southampton :	Tregaron
South Molton	Basingstoke	Carmarthenshire :
Dorset :	Suffolk, East :	Newcastle Emlyn
Sherborne	Blyth	Denbighshire :
Ely, Isle of :	Suffolk, West :	Hiraethog
North Witchford	Clare	Flintshire :
Gloucestershire :	Cosford	Maelor
Northleach	Warwickshire :	Merionethshire :
Tetbury	Shipston on Stour	Dolgelley
Herefordshire :	Wiltshire :	Penllyn
Bromyard	Devizes	Monmouthshire :
Dore and Bredwardine	Marlborough and Ramsbury	Monmouth
Leominster and Wigmore	Mere and Tisbury	Montgomeryshire :
Ross and Whitchurch	Worcestershire :	Llanfyllin
Weobley	Tenbury	Machynlleth
Huntingdonshire :	Yorkshire, East Riding :	Newtown and Llanidloes
Huntingdon	Driffield	Pembrokeshire :
Kent :	Norton	Cemaes
Romney Marsh	Pocklington	Haverfordwest
Tenterden	Yorkshire, North Riding :	Narberth
Lincolnshire, parts of Kesteven :	Aysgarth	Pembroke
East Kesteven	Easingwold	Radnorshire :
Lincolnshire, parts of Lindsey :	Helmsley	Knighton
Gainsborough	Masham	Painscastle
Spilsby	Pickering	Rhayader
	Reeth	

APPENDIX C

MEMBERSHIP OF THE REGISTRAR GENERAL'S ADVISORY COMMITTEE ON MEDICAL NOMENCLATURE AND STATISTICS AND ITS SUB-COMMITTEES, 1953

Sir Ernest Rock Carling, LL.D., F.R.C.S., F.R.C.P., F.F.R., (*Chairman*).
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 J. Boyd, Esq., C.B.E., M.D., F.R.C.P.I.
 S. Cieman, Esq., M.R.C.S., L.R.C.P.
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 Sir Ernest Finch, M.D., M.S., F.R.C.S.
 F. H. K. Green, Esq., C.B.E., M.D., F.R.C.P.
 Professor F. Grundy, M.D., M.R.C.P., D.P.H.
 C. F. Harris, Esq., M.D., F.R.C.P.
 Professor A. Bradford Hill, C.B.E., F.R.S., D.Sc., Ph.D.
 A. E. Joll, Esq.
 Professor A. J. Lewis, M.D., F.R.C.P.
 W. P. D. Logan, Esq., M.D., Ph.D., D.P.H.

E. K. Macdonald, Esq., O.B.E., M.D., D.P.H.
A. Massey, Esq., C.B.E., M.D., Q.H.P.
P. L. McKinlay, Esq., M.D., F.R.S. (Ed.).
Professor W. C. W. Nixon, M.D., F.R.C.S., F.R.C.O.G.
W. N. Pickles, Esq., M.D., M.R.C.P.
Professor R. Platt, M.D., F.R.C.P.
A. H. T. Robb-Smith, Esq., M.D., M.R.C.S., F.R.C.P.
Percy Stocks, Esq., C.M.G., M.D., F.R.C.P.
Professor R. E. Tunbridge, O.B.E., M.D., F.R.C.P.
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<i>Benjamin (B.)</i>	Tuberculosis and Social Conditions in the Metropolitan Boroughs of London. <i>British Journal of Tuberculosis</i> , Vol. 47, 4 ff., 1953.
<i>Benjamin (B.)</i>	..	..	..	..	Sleep and Tuberculosis—with <i>Nash, F. A.</i> <i>Tubercle</i> , Vol. XXXIV, 50 ff., 1953.
<i>Benjamin (B.)</i>	..	..	..	..	The Aged in their Own Homes—with <i>Chalke, H. D.</i> <i>The Lancet</i> , Vol. I, No. 6760, 588 ff., 1953.
<i>Benjamin (B.)</i>	..	..	..	..	Vital Statistics and Productivity. <i>Bulletin of the International Statistical Institute</i> , 28th Session. Vol. XXXIV, 152 ff., 1953.
<i>Benjamin (B.) and Logan (W. P. D.)</i>	..				Geographical and Social Variations in the Incidence of Notified Poliomyelitis. <i>British J. prev. soc. Med.</i> Vol. 7, 131 ff., 1953.
<i>Benjamin (B.) and Logan (W. P. D.)</i>	..				Loss of Expected Years of Life—A Perspective View of Changes between 1848-72 and 1952. <i>Monthly Bulletin of the Ministry of Health and the Public Health Laboratory Service</i> , Vol. 12, December, 244 ff., 1953.
<i>Brooke (E. M.)</i>	..	..	..	..	Incidence of Rheumatic Diseases. <i>Monthly Bulletin of the Ministry of Health and the Public Health Laboratory Service</i> , Vol. 12, June, 114 ff., 1953.
<i>Logan (W. P. D.)</i>	..	..	..	..	Mortality in the London Fog Incident 1952. <i>The Lancet</i> , Vol. I, No. 6755, 336 ff., 1953.
<i>Logan (W. P. D.)</i>	..	..	..	..	Refresher Course for General Practitioners—Death Certification. <i>British Medical Journal</i> , Vol. I, No. 4822, 1272 ff., 1953.
<i>Logan (W. P. D.)</i>	..	..	..	..	Work and Age : Statistical Considerations. <i>British Medical Journal</i> , Vol. II, No. 4847, 1190 ff., 1953.
<i>Logan (W. P. D.)</i>	Marriage and Childbearing in Relation to Cancer of the Breast and Uterus. <i>The Lancet</i> , Vol. II, No. 6797, 1199 ff., 1953.
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